

Siskiyou County Regional Aviation Plan 2020-2024

DRAFT FOR DISCUSSION PURPOSES ONLY

Siskiyou County Local Transportation Commission

Prepared By





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ABBREVIATIONS

AAC - Aircraft Approach Categories

AC - Advisory Circular

ADG – Aircraft Design Group

AIP – Airport Improvement Program

Airports – the seven public-use, general aviation airports located in the County

ALP - Airport Layout Plan

ALUC - Airport Land Use Commission

ALUCP – Airport Land Use Compatibility Plan

AMCG – Aviation Management Consulting Group

ARC – Airport Reference Code

Assurances – FAA Airport Sponsor Assurances

AWOS – Automated Weather Observing Systems

Caltrans – California Department of Transportation

CASP - California Aviation System Plan

CBD - Central Business District

CEC - California Energy Commission

CFR- Code of Federal Regulations

County - Siskiyou County

Division - Caltrans Division of Aeronautics

FAA - Federal Aviation Administration

FBO - Fixed Base Operator

FEMA – Federal Emergency Management Agency

FFY - FAA Fiscal Year

FTA - Federal Transit Administration

GPS - Global Positioning System

IBank – California Infrastructure and Economic Development Bank

IFR – Instrument Flight Rules

ILS – Instrument Landing System

LPV - Localizer Performance with Vertical Guidance

M&H – Mead & Hunt

MIRL - Medium Intensity Runway Lights

MRO - Maintenance, Repair, and Overhaul

NDB - Non-Directional Beacon

NPIAS - National Plan of Integrated Airport Systems





P3s - Public-Private Partnerships

PAPI - Precision Approach Path Indicator

PUC - California Public Utilities Code

RAP – Siskiyou County Regional Aviation Plan

RAP Team - Aviation Management Consulting Group and Mead & Hunt

RDC - Runway Design Code

REIL - Runway End Identifier Lights

RNAV – Area Navigation

RSA - Runway Safety Area

RTPA – Regional Transportation Planning Agency

RVR - Runway Visual Ranges

SASO – Specialized Aviation Service Operators

SCLTC – Siskiyou County Local Transportation Commission

SVFR - Special Visual Flight Rules

USC - United States Code

USFS - United States Forest Service

VFR – Visual Flight Rules

VOR - VHF Omnidirectional Radio Range



A. SISKIYOU COUNTY LOCAL TRANSPORTATION COMMISSION

The Siskiyou County Local Transportation Commission (SCLTC) is the designated Regional Transportation Planning Agency (RTPA) for Siskiyou County (County). The SCLTC is based in Yreka and comprised of three delegates and one alternate appointed by the Board of Supervisors and the League of Local Agencies. The County is within the jurisdictional boundaries of California Department of Transportation (Caltrans) District 2, located in Redding, California. The SCLTC, along with Caltrans District 2, fulfills the transportation planning responsibilities for the County.

B. PURPOSE OF REGIONAL AVIATION PLAN

This Siskiyou County Regional Aviation Plan (RAP) for 2020 through 2024, prepared on behalf of the SCLTC, will provide the SCLTC and the airport sponsors of the seven public-use, general aviation airports located within the County a comprehensive and coordinated aviation plan that identifies available revenue and funding sources, enhances existing revenue and funding sources, and prioritizes funding to sustain and enhance the "system of airports" in the County. In addition, the changing economic and demographic characteristics of the County has been considered in the RAP research, analysis, and outreach, which will assist in planning for the longer-term positioning of the airports within the County including capital and financial plans.

C. REGIONAL AVIATION PLAN STUDY AREA

The RAP study area encompasses seven public-use, general aviation airports located in the County (Airports), as follows: Butte Valley Airport (Airport Identifier: A32), Happy Camp Airport (Airport Identifier: 36S), Montague-Yreka Rohrer Field Airport (Airport Identifier: 105), Dunsmuir Municipal-Mott Airport (Airport Identifier: 106), Scott Valley Airport (Airport Identifier: A30), Siskiyou County Airport (Airport Identifier: SIY), and Weed Airport (Airport Identifier: O46).

Figure 1: Siskiyou County Public-Use, General Aviation Airports



Client: Siskiyou County Local Transportation Commission **DRAFT 04/16/2020** Consultant Team: Aviation Management Consulting Group and Mead & Hunt



Five of the seven Airports (Butte Valley Airport, Happy Camp Airport, Scott Valley Airport, Siskiyou County Airport, and Weed Airport) are owned and operated by the County and governed by the Board of Supervisors, which consists of five members.

Montague-Yreka Rohrer Airport is owned and operated by the City of Montague and governed by the City of Montague City Council, which consists of three members. In addition, the City of Yreka provides financial assistance for long-term capital needs at the airport.

Dunsmuir Municipal-Mott Airport is owned and operated by the City of Dunsmuir and governed by the City of Dunsmuir City Council, which consists of five members.

D. REGIONAL AVIATION PLAN STUDY PROCESS

The SCLTC engaged the consultant team (RAP Team) of Aviation Management Consulting Group (AMCG) and Mead & Hunt (M&H) to conduct all necessary research, technical analysis, and community outreach to develop the RAP.

After the collection, reviewing, and analyzing of the information provided by the SCLTC, the Airports' airport sponsors, and members of the RAP Steering Committee on the Airports and the Airports' community, market, aviation businesses, and non-commercial aeronautical entities, the RAP Team visited each of the Airports, met with stakeholders at each of the Airports, and held two stakeholder public meetings during the RAP Team site visits in June 2019.

Following the site visit, the RAP Team:

- Analyzed and conducted research pertaining to the aeronautical influencing factors (i.e., infrastructure characteristics and operational trends based aircraft and aircraft operations) and non-aeronautical influencing factors (i.e., demographic, employment, and economic trends) for each of the Airports.
- ➤ Developed system specific performance measures to analyze each of the airports in the study area from an activity and infrastructure perspective and to compare existing infrastructure to federal and state standards. Based on these results, the RAP Team conducted a demand analysis of airport-related land and improvement utilization to identify (1) current opportunities, (2) future aeronautical needs, and (3) excess improvements for each of the Airports.
- Analyzed each of the Airports within the confines of the system to identify operational and infrastructure alternatives which may include reallocation of assets and or redirection of future funding.
- ➤ Identified various funding sources and strategies for capital purchases, operational expenses, and service expansion for the Airports.
- Conducted an analysis to (1) identify capital improvement projects to support future expansion, (2) identify capital improvement projects to maximize existing services, and (3) evaluate financial impacts of existing services for each of the Airports.

In addition to the stakeholder public meetings held during the site visit, as part of the community outreach the RAP Team developed, distributed, and analyzed the results of an online survey (See *Appendix A: Survey*) of all aircraft owners and pilots with addresses in the County and conducted telephone interviews with key stakeholders at each of the Airports.



E. REGIONAL AVIATION PLAN GUIDING PRINCIPLES

The RAP Team established the following guiding principles for the RAP.

- > The RAP should give priority to safety and security, followed by financial feasibility, operational efficiency, environmental stewardship, and social responsibility
- > The RAP should be beneficial to all users of the Airports and the communities as a whole.
- The RAP should preserve flexibility to permit changes to the plan as industry and local conditions warrant.
- > The RAP shall emphasize cost-effective solutions and shall consider the total cost of implementation when evaluating alternatives.
- > The RAP shall identify potential synergies between the future development, management, and operation of the Airports.

Consultant Team: Aviation Management Consulting Group and Mead & Hunt



A. NATIONAL AIRPORT SYSTEM

The Federal Aviation Administration (FAA) prepares and submits the National Plan of Integrated Airport Systems (NPIAS) report to Congress every two years in order to maintain a plan for developing "a safe, efficient, and integrated system of public use airports adequate to anticipate and meet the needs of civil aeronautics, to meet the national defense requirements of the Secretary of Defense, and to meet identified needs of the United States Postal Service." The following guiding principles and attributes are followed by the FAA and other Federal agencies in developing the national airport system and the associated public-use airports in order to meet the demand for air transportation.

- Airports should be safe and efficient, located where people will use them, and developed and maintained to appropriate standards.
- ➤ Airports should be affordable to both users and the Government, relying primarily on producing self-sustaining revenue and placing minimal burden on the general revenues of the local, State, and Federal governments.
- > Airports should be flexible and expandable and able to meet increased demand and accommodate new aircraft types.
- Airports should be permanent with assurance that they will remain open for aeronautical use over the long term.
- Airports should be compatible with surrounding communities, maintaining a balance between the needs of aviation, the environment, and the requirements of residents.
- Airports should be developed in concert with improvements to the air traffic control system and technological advancement.
- ➤ The national airport system should support a variety of critical national objectives, such as defense, emergency readiness, law enforcement, and postal delivery.
- ➤ The national airport system should be extensive, providing as many people as possible with convenient access to air transportation, typically by having most of the population within 20 miles of a NPIAS airport.

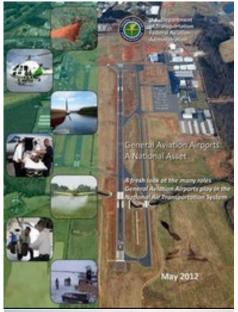
Of the 5,099 public-use airports, the NPIAS classifies 3,321 NPIAS airports by their service levels and the roles they play in the national airport system. The service level of an airport reflects the type of public service the airport provides to the local community/region and the nation. It is important to note that the term "airport" includes landing areas developed for conventional fixed-wing aircraft, helicopters, seaplanes, and balloons (e.g., airports, heliports, seaplane bases, ultralight ports, glider ports, and balloon ports). The NPIAS airport service level categories are as follows:

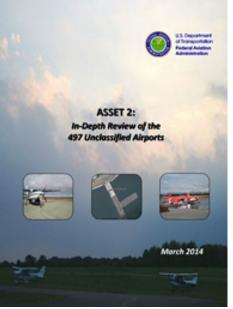
- Primary Service/Commercial Service Airports (380 airports as of 2017) have scheduled air carrier service for at least 10,000 enplaned passengers per year.
- Non-Primary/Commercial Service Airports (126 airports as of 2017) have scheduled air carrier service for 2,500 to 9,999 enplaned passengers per year.
- Non-Primary/General Aviation Airports (2,554 airports as of 2017) have no scheduled air carrier service or scheduled air carrier service for less than 2,500 enplaned passengers per year.
- Non-Primary/Reliever Airports (261 airports as of 2017) relieve congestion at designated Primary Service Airports by redirecting general aviation aircraft operations from the Primary Service Airports.



Based on two studies conducted by the FAA in 2012 and 2014, the pivotal role general aviation airports play in the United States society, economy, and aviation system was evaluated. The studies aligned all NPIAS general aviation airports into four categories based on their existing activity levels, diverse functions, and economic contributions to their communities and the Nation, as follows:

- National Airports (88 airports as of 2017) are located in metropolitan areas near major business centers, serves national and global markets, have very high levels of activity with many jets and multi-engine propeller aircraft, and averages about 249 total based aircraft (including 30 jets)
- Regional Airports (492 airports as of 2017) are located in metropolitan areas near major business centers, serves regional and national markets, have high levels of activity with some jets and multi-engine propeller aircraft, and averages about 92 total based aircraft (including 3 jets)
- Local Airports (1,278 airports as of 2017) typically are located near larger population centers (but not necessarily in metropolitan areas), serves local and regional markets, have moderate levels of activity with some multi-engine propeller aircraft, and averages about 34 total based propeller-driven aircraft and no jets
- ➢ Basic Airports (840 airports as of 2017) are typically any located in rural areas, often serve critical aeronautical functions within local and regional markets, have moderate to low levels of activity, and averages about 10 total based propeller-driven aircraft and no jets





NPIAS general aviation airports that do not fall in the above four categories remain as Unclassified Airports (243 airports as of 2017). These airports tend to have limited activity and have either no based aircraft or no more than 8 based aircraft.

NPIAS airports are eligible to receive FAA Airport Improvement Program (AIP) grants for airport planning and construction, discussed further in *Section: Funding Sources*. General Aviation airports are eligible to be added to the NPIAS if the following requirements are met:

- > The airport is owned by an eligible public sponsor;
- The airport has at least 10 based aircraft;
- ➤ The airport is not within 20 miles of an airport in the NPIAS; and
- The airport is part of a state or metropolitan airport system plan, or it is located on an adequate site to provide safe and efficient airport facilities.



B. CALIFORNIA AIRPORT SYSTEM

The California Department of Transportation (Caltrans) Division of Aeronautics (Division) prepares the California Aviation System Plan (CASP) every five years as the basis for implementing the State Aeronautics Act; identifying the Division's role in the State's multimodal, interregional, transportation system; and continuous aviation system planning.

The CASP also provides an opportunity to educate users of the CASP on the following key points related to airport system planning:

➤ Airports are not a single trip attractor or generator by one mode of travel. Airport access is a complex issue that needs to be acknowledged in larger multi-modal transportation system access studies. These studies need to include inter- and intra-model connectivity to airports.

The perception that airports are just places for airplanes to take-off and land has long been dismissed by aviation system planners. Instead, airports should more accurately be viewed as economic enterprise hubs, employment centers, mixeduse commercial business centers, bulk cargo transfer centers, transit hubs, and more.

— California Aviation System

- Airports do more for their communities than house aircraft. They are business hubs that connect communities in ways traditional surface transportation cannot.
- Defining what constitutes compatible land uses around airports and incorporating them into land use and transportation system planning and modeling efforts is important.
- ➤ Redefining airports as potential employment centers and air cargo as a specialized form of goods movement is necessary to dispel the misconception that airports are simply a place for commercial passenger arrivals and departures.
- ➤ It is important to include airports and land uses in the vicinity of airports when proposed development and road improvement projects are reviewed and evaluated regarding their impacts on health, safety, and the environment.

The California Public Utilities Code (PUC) requires every county in California that has an airport operating for the benefit of the public to form an Airport Land Use Commission (ALUC). The primary function of an ALUC is to "...ensure the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports..." This function is accomplished in two primary ways, including the preparation of an Airport Land Use Compatibility Plan (ALUCP) and by reviewing local agency general and specific plans for consistency with the ALUCP.

ALUCs play a vital role in protecting public-use airports from potential incompatible land uses through the preparation and utilization of the ALUCP. The ALUCP establishes the following essential elements:

- ➤ Policies to minimize noise impacts on new land uses. The purpose is to discourage the development of land use encroachment within the influence area of an airport.
- Procedures to alert persons or businesses that plan to relocate near an airport of aircraft overflights. This is primarily carried out through real estate disclosure.
- Safety zones and polices to minimize hazardous conditions for new land uses. This purpose is to discourage the encroachment of land uses within the proximity of an airport, generally a two-mile radius around the airport.
- Policies that minimize obstructions to navigable airspace. This protects people by minimizing hazard while in flight but is also vital for ensuring an airport can perform its vital economic role.



The CASP classifies California airports in separate primary and sub categories based on the communities served by the airport, access the airport provides, population size or geographic location of region the airport serves, types of flying activities that occur, types and quantities of aircraft accommodated, and services provided. The CASP primary categories are as follows:

- ➤ Limited Use Airports (33 airports as of 2019) provide limited access; are usually located in non-urban areas; may be used for a single purpose; have a few or no based aircraft; and provide no services.
- Community Airports (94 airports as of 2019) provide access to other regions and states; are located near small communities or in remote locations; serve, but are not limited to, recreational flying, training, and local emergencies; accommodate predominantly single-engine aircraft under 12,500 pounds gross weight; and provide basic or limited services for pilots or aircraft.
- ➤ Regional Airports (69 airports as of 2019) provide the same access as Community airports but may provide international access; are located in an area with a larger population base than Community airports, while serving a number of cities or counties; serve the same activities as Community airports but with a higher concentration of business and corporate aircraft activity; may accommodate most business, multi-engine and jet aircraft; may provide most services for pilots and aircraft including aviation fuel; and may have a published instrument approach and an air traffic control tower.
- Metropolitan Airports (19 airports as of 2019) serve the same activities as Regional airports; are located in urbanized areas; provide for the same flying activities as Regional airports with an emphasis on business, charter, and corporate flying; accommodate all business jet services for pilots and aircraft, including jet fuel; has a published instrument approach and an air traffic control tower; and provide flight planning facilities.
- ➤ Commercial Airports (27 airports as of 2019) receive scheduled passenger service and have 2,500 or more enplaned passengers per year.

In addition, the following CASP subcategories are intended to emphasize prominent operational activities occurring at airports in a particular category further associating airports by function.

- ➤ **Agriculture:** The use of an airport by aircraft for fertilizer application, seed dispersal, pest control, and crop-dusting. Used as a subcategory to designate a service provided at a Limited Use Airport or a prevalent activity at a Community Airport.
- Business/Corporate: The use of an airport by an individual for transportation required by a business in which the individual is engaged (the pilot is not compensated), or the use of an airport by aircraft owned or leased by a company to transport its employees and/or property (professional pilot is compensated). Used to designate the prevalent service provided at a Regional or Metropolitan Airport.
- Cargo: The use of an airport for transporting freight, mail, and/or packages over a specified route by air. Used as a category to designate the prevalent service provided at a Regional or Metropolitan Airport.
- Firefighting: The use of an airport by aircraft for aerial firefighting operations. Used as a subcategory to designate a service provided at a Limited Use Airport or a prevalent activity at a Community Airport.

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- ➤ **Medical Emergency:** The use of an airport by fixed-wing air ambulance aircraft to transport medical patients, accident victims, transplant organs and vital supplies to hospitals, serves remote regions not practical to be served by helicopters. Used as a subcategory to designate a service provided at a Limited Use Airport.
- ➤ **Recreational:** The use of an airport by pilots not engaged in corporate or business flying or formal instruction, includes recreational and tourist destination access. Used as a subcategory to designate the prevalent service provided at a Community, Regional, or Metropolitan Airport.
- Recreational Access: The use of an airport by pilots for recreational destination access. Used as a subcategory to designate a service provided at a Limited Use Airport.

The CASP outlines seven policy topic areas (and an additional 27 associated policies and 34 associated objectives), including Stewardship and Preservation (SP), Safety (SF), Mobility (MB), Airport Integration in Land Use Planning (PL), Economics (EC), Environment (EV), and Education and Research (ER). Following are only those policies that have direct applicability to the RAP.

- > SP-1: Encourage the development of private flying and the general use of air transportation
- > **SF-1:** Foster and promote safety in aeronautics
- ➤ MB-1: Foster access for small and rural communities to the national air transportation system
- ➤ MB-2: Improve access to aviation resources through appropriate multi-modal transportation initiatives
- **EC-1:** Encourage the flow of private capital into aviation facilities
- ➤ EC-2: Develop information programs to increase understanding of the role of aviation in the economic development of the State
- ➤ EC-3: Promote the role of publicly owned or operated airports as a matter of statewide importance in the development of commerce and tourism

C. GENERAL AVIATION AIRPORT AERONAUTICAL FUNCTIONS

Having a comprehensive system of general aviation airports in the United States supports national, regional, and local economies while also providing a safety net of airports to support emergency aircraft diversions when necessary due to mechanical problems, medical emergencies, deteriorating weather conditions, or other unforeseen circumstances.

These connections are especially important to those 86.3 million people living in rural areas, where a general aviation, public-use airport may provide the only means of transportation thereby providing critical community access for aeromedical flights, disaster relief, search and rescue, aerial application of agricultural agents, time-critical delivery of medicine, tools, mail and other documents, and other key functions.

Further, the diversity of general aviation, public-use airports serves the public interest by offering a base of operation or a location for transient operations for a variety of commercial and non-commercial aeronautical activities and functions, as follows:

1. Emergency Preparedness and Response Activities

- Aeromedical Flights: Provides air transportation to patients in need of specialized medical care.
- Law Enforcement Flights: Provides aerial platforms for local, state, or national agencies to monitor compliance with laws, enforce laws, and respond to emergencies.



- **Emergency Diversion Airports:** Provides pilots with immediate alternatives to intended destination in the event of unexpected bad weather or flight emergency.
- Disaster Relief and Search and Rescue Airports: Provides a staging area to support relief efforts wherever they are needed, including as a staging area for the all-volunteer Civil Air Patrol, whose members are often called upon to locate and facilitate the rescue of missing persons or others in need.
- Critical Community Services Airports: Provides a staging area for the State and Federal Government agencies to provide critical community services, including as a staging area for the U.S. Forest Service and state firefighting agencies to fight fires.

2. Critical Community Access Functions

- ➤ Remote General Aviation Airports: In some parts of the country, general aviation airports provide the only means of transportation. Without these airports, residents would be faced with isolation or would have to incur substantial time, money, and risk traveling by other means. Remote airports contribute to the national economy by reducing the resources needed to connect these communities to the national economy.
- ➤ Non-Scheduled Charter Flights: When scheduled air service either is not available or inconvenient, businesses and individuals charter aircraft. These flights save time and make it possible to fly directly to places that cannot be reached by scheduled air service.

3. Non-Commercial Aeronautical Activities

- Personal Flights: About a third of all Part 91 flying in the United States is for personal reasons, which may include practicing flight skills, personal or family travel, or personal enjoyment.
- ➤ **Business Flights:** About 11 percent of all Part 91 flying in the United States is done by business owners and managers flying themselves to meetings or other events. Most of this flying is done with piston or turboprop aircraft.
- ➤ Corporate Flights: About 12 percent of all Part 91 flying in the United States is done in aircraft owned by a business and piloted by a professional pilot. The majority of these flights are in jets and cover long distances, with some flying to intercontinental and international destinations.

4. Commercial Aeronautical Activities

- ➤ Aircraft Fueling Services: Typically provided by fixed based operators (FBOs), which can either be owned and operated by a private entity or the airport sponsor, and includes full-service and/or self-service of Jet A or Aviation Gasoline.
- ➤ Aircraft Ground Handling Services: Typically provided by FBOs and includes aircraft marshalling, towing, staging, and ancillary ground support functions including de-icing, preheating, ground power, air conditioning, aircraft cleaning, lavatory service, etc.
- ➤ Aircraft Parking and Storage Facilities: Typically provided by FBOs and includes tie-down and hangar (which includes T-Hangar, executive hangar, corporate hangar, and community hangar storage).
- ➤ Passenger and Crew Services: Typically provided by FBOs and includes baggage handling, ground transportation, catering, and concierge services.
- Aircraft Maintenance and Repair Services: Typically provided by specialized aviation service operators (SASOs), which are typically owned and operated by a private entity, and includes airframe and power plant inspection, repair, and overhaul.
- Part Sales: Typically provided by SASOs and includes the sale of airframe, powerplant, and avionics parts.



- > Aircraft Modification and Refurbishment Services: Typically provided by SASOs and includes the design, development, and installation of components for which a Supplement Type Certificate has been obtained and exterior and interior aircraft refurbishment including painting, reupholstery, etc.
- > Avionics Maintenance and Repair Services: Typically provided by SASOs and includes the installation and repair of aircraft electrical systems that provide communication capabilities, navigation information, and aircraft performance data.
- > Accessory and Propeller Maintenance and Repair Services: Typically provided by SASOs and includes the installation, repair, and overhaul of generators, pressurization valves, inverters, and lighting accessories and the installation, repair, and overhaul of propellers (including plating and balancing).
- > Ground and Flight Instruction Services: Typically provided by SASOs and includes both flight and ground training from the beginning (e.g., private pilot) through advanced ratings (e.g., airline transport pilot).
- > Aircraft Rental Services: Typically provided by SASOs and involves the rental of aircraft to certified airmen (including student pilots) for personal, business, or training purposes.
- > Aircraft Charter Services: Typically provided by SASOs and includes non-scheduled passenger and cargo air transportation services that are provided in accordance with 14 Code of Federal Regulations (CFR) Part 135, 121, 125, 127, 133, 137 (FAA regulations pertaining to revenue producing "charter" operations).
- > Aircraft Management Services: Typically provided by SASOs and includes the management and operation of an aircraft on behalf of the aircraft owner on a contract basis and is typically provided in accordance with 14 CFR Part 91 (FAA regulations pertaining to "proprietary" transport or non-revenue producing operations).
- > Aircraft Sales: Typically provided by SASOs and includes the sale of new and/or pre-owned aircraft.

5. Commercial, Industrial, and Economic Functions

- > Agricultural Flights: Provides aerial application of fertilizer, fungicides, and pesticides to agricultural fields in an efficient manner over a large geographic area.
- > Aerial Surveying and Observation Flights: Provides aerial surveying for real estate developments, energy and utility companies (e.g., powerlines and pipelines), oil and mineral exploration companies, and municipalities (e.g., document tax maps).

6. Destination and Special Functions

- > Tourism and Access to Special Events: General aviation airports often enable access to areas otherwise inaccessible for recreation, including remote parks, mountainous areas, and islands. In addition, during special events (e.g., the Super Bowl, college championship playoffs or bowl games, major concerts, NASCAR races, etc.), general aviation airports are used by both charter carriers and private operators to supplement facilities and services at primary airports.
- > Sightseeing Flights: Provides sightseeing flights in local area to tourists and local residents.
- > Special Aviation Events: General aviation airports provides venues for special aviation events including airshows, balloon festivals, blimp rides, and skydiving shows.

Client: Siskiyou County Local Transportation Commission Consultant Team: Aviation Management Consulting Group and Mead & Hunt



D. GENERAL AVIATION MARKET SEGMENTS

The products, services, and facilities that are offered at general aviation airports have been predicated primarily on the demand created by five distinctly separate operating classifications within the, as follows:

1. Personal

In many respects, aircraft owners and operators who have committed time and financial resources to this segment of the industry have done so because of a sheer love of aviation. The "romance factor", which has enthralled both young and old alike, is a very important element in understanding the relationship between people and flying machines.

The aircraft utilized for personal (and recreational) flying are typically based at public-use and private-use general aviation airports. For the most part, the aircraft used for personal flying are single-engine and light multi-engine piston-powered aircraft, although some larger aircraft, including turbine-powered aircraft, are also used for this purpose. This segment of the market is typically price oriented, seeking the best price for the commercial aeronautical products, services, and/or facilities.

2. Business

The business segment of the general aviation market is viewed as an integral part to the long-term growth and development of the general aviation industry. The business segment is made up of aircraft owners flying their own aircraft for business purposes. For the most part, the aircraft used for business flying are high performance single-engine piston aircraft, multi-engine piston aircraft, single-engine turboprop aircraft, multi-engine turboprop aircraft, and small jet aircraft. This segment of the market is less price oriented than the personal segment, but is still price sensitive.

3. Corporate

The corporate segment of the general aviation market is viewed as the more stable and growing part of the general aviation industry. The corporate segment is made up of aircraft owners that hire professional flight crews to fly the aircraft for business/corporate purposes. For the most part, the aircraft used for corporate flying are single-engine turboprop aircraft, multi-engine turboprop aircraft, and all sizes of jet aircraft. This segment of the market is least price sensitive as these companies understand the economic value of using general aviation aircraft and the value of time.

4. Commercial

The commercial aviation segment is a significant economic engine as it represents companies that use general aviation aircraft for commercial purposes including flight instruction, air taxi (non-scheduled, on-demand), medical transportation (air ambulance), sightseeing, aerial observation (e.g., pipeline/power-line patrol/inspection), aerial application (e.g., agriculture, photography, firefighting, etc.), cargo, and much more. The commercial segment of the market is typically value oriented, seeking the best combination of service and price.

5. Government

The government aviation segment is the smallest segment of general aviation. Government use of General Aviation aircraft include transportation of government personnel, non-government personnel, prisoners, and cargo; supporting law enforcement, emergency preparedness, disaster relief, wildlife and forest management, fighting forest fires, border patrol, surveillance and counterterrorism; and a host of other applications.

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E. FAA AIRPORT DESIGN STANDARDS AND REFERENCE CODES

NPIAS airports are expected to adhere to current federal aviation standards for airport design. Furthermore, any grant by the FAA to a NPIAS airport for new or improved airside infrastructure must adhere to current standards, except as approved by the FAA. The Airport Reference Code (ARC) is an airport designation that signifies an airport's highest Runway Design Code (RDC). The ARC is used for planning and design only and does not limit the aircraft that may be able to operate safely on an airport. The first component of the ARC, depicted by a letter, is the Aircraft Approach Category (AAC) and relates to an aircraft's approach speed (operational characteristics).

Table 1: Aircraft Approach Categories (AAC)

AAC	Approach Speed					
Α	Approach speed less than 91 knots					
В	Approach speed 91 knots or more but less than 121 knots					
С	Approach speed 121 knots or more but less than 141 knots					
D	Approach speed 141 knots or more but less than 166 knots					
Ε	Approach speed 166 knots or more					

The second component of the ARC, depicted by a Roman numeral, is the Aircraft Design Group (ADG) and relates to either the aircraft wingspan or tail height (physical characteristics); whichever is most restrictive, of the largest aircraft expected to operate on the airport's runway and taxiways adjacent to the runway.

Table 2: Aircraft Design Groups (ADG)

ADG	Tail Height (feet)	Wingspan (feet)
I	< 20'	< 49'
ll l	20' to <30'	49' to <79'
III	30' to <45'	79' to <118'
IV	45' to <60'	118' to <171'
V	60' to <66'	171' to <214'
VI	66' to <80'	214' to <262'

The third component of the ARC relates to the visibility minimums expressed by Runway Visual Range (RVR) values in feet.

Table 3: Runway Visual Ranges (RVR)

RVR	Instrument Flight Visibility Category (statute mile)		
VIS Visual approach use only			
5000	Not lower than 1 mile		
4000	Lower than 1 mile, but not lower than ¾ mile		
2400 Lower than ¾ mile, but not lower than ½ mile			
1600 Lower than ½ mile, but not lower than ¼ mile			
1200	Lower than ¼ mile		

The design aircraft sets the airport's design criteria. As approach speed increases, runway length must be longer, and taxiways must likewise be longer. As wingspan increases, taxiways must have greater separation. Similarly, the loaded weight of the design aircraft determines the criterion for runway strength (weight bearing capacity).



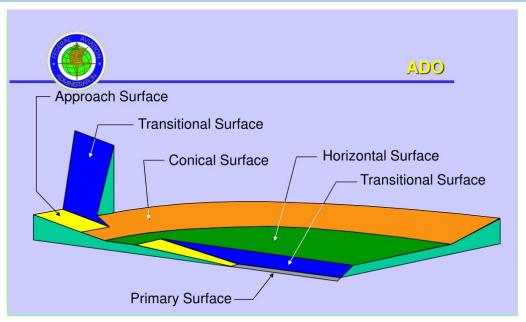
F. FAA AIRSPACE REGULATIONS

1. Approach Slope Airspace

A safe airport controls not just the spacing of runways and taxiways to avoid aircraft collisions, but also the surrounding airspace to keep it clear of obstructions that aircraft could strike during approach and takeoff. For safety's sake, the FAA requires NPIAS airports to control this airspace to eliminate obstructions. In actuality, all public-use airports should control this airspace. The FAA defines these airport imaginary surfaces (approach slope surfaces) in the 3-dimensional airspace around airports, through which any protruding object would obstruct an aircraft on approach or takeoff, as follows:

- ➤ **Primary Surface:** A surface aligned with and centered on the runway, extending 200 feet beyond the threshold in each direction.
- ➤ **Approach Surface:** An inclined slope extending outward and upward from the ends of the primary surfaces. The innermost part of the approach surface overlaps with the runway protection zone.
- ➤ Horizontal Surface: A horizontal plane centered on and 150 feet above the airport. The limits of the horizontal surface are the approach surfaces on the inside and a set distance from the runways, depending on the type of airport, on the outside.
- > Transitional Surface: An inclined slope between the primary or approach surfaces and any other surface.
- Conical Surface: An inclined slope extending upward and outward from the outside edge of the horizontal surface.

Figure 2: Airport Imaginary Surfaces



The FAA publishes instrument approaches for runways at airports, defining the type of instrument approach and the dimensions of the approach surface (especially the length from the primary surface) for each published approach. Instrument approaches can use either ground-based signals (ILS, VOR) or satellite-based signals (RNAV, GPS, LPV), with the newer satellite-based systems gaining increasing favor as they can be used without expensive and delicate installations at airports.



2. Controlled Airspace

The FAA and the Department of Defense control parts of the airspace over the United States according to a system of airspace classes. Controlled airspace is classified as follows:

- ➤ Class A airspace covers the United States and includes all airspace from 18,000 feet to 60,000 feet, where larger jet aircraft typically fly. Aircraft flying in Class A airspace must operate under instrument flight rules.
- ➤ Class B airspace is a circular airspace over and 30 nautical miles around the nation's busiest airports, within which all aircraft must receive clearance and follow instructions from the airport traffic control tower. Class B airspace grows in diameter with increasing steps in elevation, to include approaching aircraft. As an example, San Francisco International Airport (San Francisco, California) is circled with overlying Class B airspace.
- ➤ Class C airspace is a circular airspace over some of the larger, more congested airports that accommodate instrument landings and have airport traffic control towers. All aircraft within Class C airspace must communicate with and follow instructions from Air Traffic Control. As an example, Sacramento International Airport (Sacramento, California) is circled with overlying Class C airspace.
- ➤ Class D airspace is a circular airspace over smaller, less congested airports that have airport traffic control towers and accommodate instrument landings. All aircraft within Class D airspace must communicate with and follow instructions from the tower when it is operating. As an example, Rogue Valley International Airport (Medford, Oregon) is circle with overlying Class D airspace.
- ➤ Class E airspace is the space outside of other controlled airspace below 18,000 feet elevation and generally above 700 feet above the ground, within which aircraft may fly under visual flight rules without communicating with ground controllers, or under instrument flight rules while communicating with ground controllers. VOR or Victor airways, a system of air traffic routes radiating from very high-frequency omni-directional radar, are also Class E airspace.
- Class G airspace is the remaining uncontrolled airspace that is generally close to the ground, where aircraft may fly under visual flight rules with no restriction. Special use and other controlled airspace types also exist, for example, around military and aerospace installations.

Figure 3: Airspace Classifications



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G. FAA AIRPORT SPONSOR ASSURANCES

The rights and responsibilities of airport sponsors of federally obligated airports are based on Federal law and are codified at 49 United States Code (USC) Section 47107. In exchange for Federal airport development assistance (including the transfer of Federal property for airport purposes), airport sponsors make binding commitments to assure that the public's interest in civil aviation will be served. An airport sponsor's responsibilities are commonly referred to as the Airport Sponsor Assurances (Assurances). While the language of certain Assurances may be identical to or closely track the language of the statute, the Assurances are more expansive and reflect the FAA's interpretation and application of the statute. The Assurances have the following general features:

- Currently, there are 39 Assurances, several of which have multiple sub-parts.
- ➤ A number of Assurances require satisfaction of other statutory provisions and/or FAA regulations, policies, and guidance. For example, Assurance 1 requires compliance with 26 distinct laws, including 49 USC, Subtitle VII (Aviation Programs). Assurance 34 requires that any AIP project conform to current FAA policies, standards, and specifications, including current FAA Advisory Circulars (AC).
- ➤ The Assurances generally apply for 20 years. However, some Assurances apply into perpetuity as a result of separate statutory requirements. These include the prohibition on granting an exclusive right and the requirement to use airport revenue only for airport purposes. Additionally, the Assurances associated with the use and disposal or real property apply in perpetuity when the airport sponsor has received AIP funds in connection with the acquisition of property.
- ➤ The penalties for not maintaining compliance with the Assurances can be severe. The FAA may withhold approval of a grant and may withhold payment under an existing grant agreement. The FAA also may seek injunctive relief in U.S. District Court.

The following will serve as a guide to current FAA policy interpretation of Assurances which are commonly at issue for airport sponsors at federally obligated airports.

Assurance 5 (Preserving Rights and Powers) requires that the airport sponsor of a federally obligated airport:

"...will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms conditions, and assurances in the grant agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere with such performance by the sponsor."

Put simply, an airport sponsor is prohibited from taking any action which could preclude it from complying with the Assurances. For example, an airport sponsor may not enter into a management agreement which would result in exclusive use or discrimination at the airport. Airport sponsors are strongly encouraged to use strong subordination clauses to ensure the ability to comply with Assurance 5 is not impacted.

In addition to obligating the airport sponsor to preserve its rights and powers to carry out all grant agreement requirements, this assurance also places certain limitations on the airport sponsor's use of airport land. Most real estate transactions require prior FAA approval, and airport sponsors are prohibited from encumbering airport property.

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Assurance 22 (Economic Nondiscrimination) requires that the airport sponsor of a federally obligated airport:

-will make its airport available as an airport for public use on reasonable terms, and without... unjust discrimination, to all types, kinds, and classes of aeronautical uses." Assurance 22(a)
-may establish such equal and not unjustly discriminatory conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport." Assurance 22(h)
- "...may...limit any given type, kind, or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or...to serve the civil aviation needs of the public." Assurance 22(i)

The Assurance does permit the airport sponsor to exercise control of the airport sufficient to preclude unsafe and efficient use of navigable airspace which would be detrimental to the civil aviation needs of the public. However, any airport sponsor restrictions on aeronautical activities based upon safety and efficiency must be adequately justified and supported, and they must be approved in advance by the FAA. In all cases, the FAA is the final arbiter regarding aviation safety and will make the determination regarding the reasonableness of any proposed measure to restrict, limit, or deny aeronautical access to the airport. The FAA considers it inappropriate to provide federal assistance for improvements to airports where the benefits of such improvements will not be fully realized due to inherent restrictions on aeronautical activities.

Airport sponsors are required to operate federally obligated airports for the use and benefit of aeronautical users and to make those airports available to all types, kinds, and classes of aeronautical activities on fair and reasonable terms, and without unjust discrimination. However, airport sponsors may adopt reasonable leasing/rents and fees policies, commercial minimum standards, and airport rules and regulations.

Airport sponsors have an obligation to treat in a uniform manner those users making the same or similar use of the airport. However, an airport sponsor may treat similarly situated airport users differently, including rental rates, lease terms, etc., as long as those differences are not unjust.

Assurance 22(f) provides that an airport sponsor:

"...will not exercise or grant any right or privilege which operates to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees (including, but not limited to, maintenance, repair, and fueling) that it may choose to perform."

The FAA considers the right to self-service as prohibiting the establishment of any unreasonable restriction on aircraft owners or operators regarding the servicing of their own aircraft and equipment. When airport users and airport sponsors disagree about whether or not a restriction is reasonable and a formal complaint is filed, the FAA becomes the final arbiter in the matter.

Aircraft owners must be permitted to fuel, wash, repair, and otherwise take care of their own aircraft with their own personnel, equipment, and supplies. The airport sponsor, however, is obligated to operate the airport in a safe and efficient manner. The establishment of fair and reasonable rules, applied in a not unjustly discriminatory manner, governing the introduction of equipment, personnel, or practices which would be unsafe, unsightly, detrimental to the public welfare, or which would affect the efficient use of airport facilities by others, is not unreasonable.

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Assurance 23 (Exclusive Rights) provides that the sponsor of a federally obligated airport:

...will permit no exclusive right for the use of the airport by any persons providing, or intending. to provide, aeronautical services to the public..."

The fact that an aeronautical activity is provided by only one entity does not necessarily establish an exclusive rights violation. An exclusive rights violation is the denial by an airport sponsor to afford other qualified parties an opportunity to be an on-airport aeronautical service provider.

Although federally obligated airports may impose qualifications and minimum standards upon those who engage in aeronautical activities, the FAA has taken the position that the application of any unreasonable requirement or standard that is applied in an unjustly discriminatory manner may constitute a constructive grant of an exclusive right. When airport users and airport sponsors disagree about whether or not a requirement is reasonable and a formal complaint is filed, the FAA becomes the final arbiter in the matter.

Assurance 23 provides for two limited exceptions. An airport sponsor may choose to offer some or all aeronautical services itself and exclude other entities from competing with these services. This is referred to as the airport sponsor's proprietary exclusive right. If an airport sponsor chooses to exercise its proprietary exclusive right to offer aeronautical services, it must do so with its own resources and its own employees; airport sponsors may not contract out their proprietary exclusive right. The second exception applies when the airport sponsor faces unreasonably costly, burdensome, or impractical challenges in accommodating more than one FBO (or SASO) to provide a service and adding a second FBO would result in a reduction in space leased to and actively used by the existing FBO.

Assurance 24 (Fee and Rental Structure) provides that the sponsor of a federally obligated airport:

"...maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at that particular airport, taking into account such factors as the volume of traffic and economy of collection."

The airport sponsor's obligation to make an airport available for public use does not preclude the airport sponsor from recovering the cost of providing the facility. The airport sponsor is expected to recover its costs through the establishment of fair and reasonable rents, fees, or other user charges that will make the airport as self-sustaining as possible under the circumstances existing at the particular airport.

The FAA's Policy Regarding Airport Rates and Charges (61 Federal Register 31994; June 21, 1996) as amended) provides comprehensive guidance on the legal requirement that airport rents, fees, and charges be fair, reasonable, and not unjustly discriminatory. Federal law does not prescribe a single approach to rate-setting; airport sponsors may utilize a preferred methodology as long as that methodology is applied consistently to similarly-situated aeronautical users and conforms to other requirements outlined in the Policy. Ordinarily, the FAA will not investigate the reasonableness of a general aviation airport's rents, fees, or charges absent evidence of a progressive accumulation of surplus aeronautical revenues.

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Assurance 25 (Airport Revenues) provides that:

"All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport..." Assurance 25(a)

Airport revenue (aeronautical and nonaeronautical rents, fees, and charges) must be used for the operational and capital costs of the airport, the local airport system, or other airport sponsor facilities that are directly and substantially related to the air transportation of passengers or property. Certain airports are exempted from this requirement because the law grandfathers certain arrangements that existed prior to September 3, 1982. The FAA's Policy and Procedures Concerning the Use of Airport Revenue (64 Federal Register 7696; February 16, 1999) provides several examples of unlawful revenue diversion, as follows:

- paying in excess of the value of goods or services the airport sponsor receives;
- improper cost allocations:
- > charging less than fair market value rent to nonaeronautical users, including the airport sponsor itself;
- directly subsidizing air carriers;
- using airport revenue for general economic development activities;
- paying for marketing and promotions not related to the airport;
- loaning money to other entities at less than prevailing rates; and
- using airport revenue to participate in some types of community events.

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H. SISKIYOU COUNTY AIRPORTS

1. Airport Attributes

Following are the attributes of the public-use, general aviation airports located in the County and included in the RAP.

Table 4: Siskiyou County Airports' Attributes

Airport Attributes						
Airport Name	Siskiyou County Airport	Butte Valley Airport	Happy Camp Airport			
FAA Airport Identifier	SIY	A32	36S			
City and State	Montague, CA	Dorris, CA	Happy Camp, CA			
Distance/Direction from CBD	3 Miles NE	5 Miles SW	0 Miles SW			
Airport Sponsor	County of Siskiyou	County of Siskiyou	County of Siskiyou			
Type of Airport Sponsor	Public	Public	Public			
Airport Governing Body	Board of Supervisors	Board of Supervisors	Board of Supervisors			
Type of Airport Governing Body	County	County	County			
Type of Airport Operator	County	County	County			
Airport Advisory Body	No	No	No			
Number of Employees	0	0	0			
Part of an Airport System	Yes	Yes	Yes			
Type of NPIAS Airport	General Aviation	General Aviation	General Aviation			
Type of General Aviation Airport	Local	Unclassified	Unclassified			
California CASP Classification	Community	Limited Use	Community			
Airport Reference Code (ARC)	C-III	B-I	B-I			
Existing Roles ¹	REC/CALFIRE	REC	REC/CALFIRE			
Current Master Plan	May 26, 1987	May 26, 1987	May 26, 1987			
Airport Size (acres)	1,000	234	64			
Landing Fee	Yes	No	No			
Number of Runways	1	1	1			
Longest Runway (length and width)	7,490' x 150'	4,300' x 60'	3,000' x 50'			
Airport Beacon	Yes	Yes	None			
Runway Lighting	MIRL/PAPI/REIL	None	None			
Weight Bearing Capacity (in thousands of pounds)	Single wheel: 60 Double wheel: 180 Double tandem: 270	Single wheel: 30	Single wheel: 30			
Precision Approaches	None	None	None			
Non-Precision Approaches	NDB or GPS-A	None	None			
Air Traffic Control Tower	No	No	No			
Other	USFS tanker base					

¹ Existing Roles: REC - Recreational – transient link to local businesses, PB - Personal businesses, CORP - Corporate – link to local businesses, PKG - Small-package shipping, MED - Medical transport – based or occasional use, CALFIRE – Use of the airports by CalFire and/or contractor aircraft - based or occasional use, CHARTER – Commercial charter activity – links to local businesses or recreational uses



Table 4: Airport Attributes (continued)

Airport Attributes					
Airport Name	Scott Valley Airport	Weed Airport			
FAA Airport Identifier	A30	O46			
City and State	Fort Jones, CA	Weed, CA			
Distance/Direction from CBD	3 Miles S	4 Miles NW			
Airport Sponsor	County of Siskiyou	County of Siskiyou			
Type of Airport Sponsor	Public	Public			
Airport Governing Body	Board of Supervisors	Board of Supervisors			
Type of Airport Governing Body	County	County			
Type of Airport Operator	County	County			
Airport Advisory Body	No	No			
Number of Employees	0	0			
Part of an Airport System	Yes	Yes			
Type of NPIAS Airport	General Aviation	General Aviation			
Type of General Aviation Airport	Local	Basic			
California CASP Classification	Community	Community			
Airport Reference Code (ARC)	B-I	B-I			
Existing Roles ²	REC/CALFIRE	REC			
Current Master Plan	May 26, 1987	May 26, 1987			
Airport Size (acres)	53	344			
Landing Fee	No	Yes			
Number of Runways	1	1			
Longest Runway (length and width)	3,700' x 50'	5,000' x 60'			
Airport Beacon	Yes	Yes			
Runway Lighting	MIRL	MIRL			
Weight Bearing Capacity (in thousands of pounds)	Single wheel: 12	Single wheel: 12			
Precision Approaches	None	None			
Non-Precision Approaches	None	RNAV (GPS)			
Air Traffic Control Tower	No	No			
Other	USFS helitack base				

² Existing Roles: REC - Recreational – transient link to local businesses, PB - Personal business, CORP - Corporate – link to local businesses, PKG - Small-package shipping, MED - Medical transport – based or occasional use, CALFIRE – Use of the airports by CalFire and/or contractor aircraft - based or occasional use, CHARTER - Commercial charter activity - links to local businesses or recreational uses



Table 4: Airport Attributes (continued)

Airport Attributes		
Airport Name	Montague Airport- Yreka Rohrer Field	Dunsmuir Municipal-Mott Airport
FAA Airport Identifier	105	106
City and State	Montague, CA	Dunsmuir, CA
Distance/Direction from CBD	1 Mile W	3 Miles N
Airport Sponsor	City of Montague	City of Dunsmuir
Type of Airport Sponsor	Public	Public
Airport Governing Body	City Council	City Council
Type of Airport Governing Body	City	City
Type of Airport Operator	City	City
Airport Advisory Body	No	Yes
Number of Employees	0	0
Part of an Airport System	No	No
Type of NPIAS Airport	N/A	General Aviation
Type of General Aviation Airport	N/A	Basic
California CASP Classification	Community	Community
Airport Reference Code (ARC)	Unknown	A-I
Existing Roles ³	REC	REC
Current Master Plan	Unknown	Unknown
Airport Size (acres)	90	126
Landing Fee	No	No
Number of Runways	1	1
Longest Runway (length and width)	3,360' x 50'	2,800' x 60'
Airport Beacon	None	None
Runway Lighting	MIRL	None
Weight Bearing Capacity (in thousands of pounds)	Single wheel: 12	Single wheel: 12.5
Precision Approaches	None	None
Non-Precision Approaches	None	None
Air Traffic Control Tower	No	No
Other		

³ Existing Roles: REC - Recreational – transient link to local businesses, PB - Personal business, CORP - Corporate – link to local businesses, PKG - Small-package shipping, MED - Medical transport – based or occasional use, CALFIRE – Use of the airports by CalFire and/or contractor aircraft - based or occasional use, CHARTER - Commercial charter activity - links to local businesses or recreational uses



2. Caltrans Inspection Deficiencies and Recommendations

Following are the deficiencies identified and recommendations made by the Caltrans Division during the State most recent permit compliance inspection and FAA Airport Master Record update for the publicuse, general aviation airports located in the County and included in the RAP.

Siskiyou County Airport

- ➤ The east side of the closed crosswind runway is being used as a glider parking ramp. As aircraft are parking on and gaining access to the runway from this area, runway holding position markings must be installed at 250 feet from the runway centerline. Markings must be applied as applicable for ARC C-III standards, in accordance with FAA AC 150/5340-1L, Standards for Airport Markings, Chapter 3 and FAA AC 150/5300-13A, Airport Design, Table A7-8. This is a repeat discrepancy.
- ➤ The west side of the closed crosswind runway is being used as a taxiway. A runway holding position marking must be installed on the taxiway at 250 feet from the runway centerline. The marking must be applied as applicable for ARC C-III standards, in accordance with FAA AC 150/5340-1L, Standards for Airport Markings, Chapter 3 and FAA AC 150/5300-13A, Airport Design, Table A7-8.
- ➤ Multiple rocks, greater than three inches in diameter, are located within the RSA. Please ensure that these rocks are removed or relocated beyond 250 feet lateral to the runway centerline in accordance with FAA AC 150/5300-13A, Airport Design, Table A7-9.
- Runway markings are faded and must be re-marked in accordance with FAA AC 150/5340-1L, Standards for Airport Markings, Chapters 2.
- ➤ Many broken, missing, and discolored taxiway reflectors along the parallel taxiway. These reflectors must be installed or replaced with the standard blue taxiway reflectors in accordance with FAA AC 150/5345-390, Specifications for L-853, Runway and Taxiway Retro Reflective Markers. This is a repeat discrepancy.
- ➤ The taxiway and ramp pavement is raveling and cracking and should be addressed in the near future to prevent further deterioration.

Butte Valley Airport (Inspection Date: July 19, 2019)

- > Brush is penetrating the Part 77, Primary Surface and must be removed.
- ➤ The runway centerline marking is missing in many locations, and taxiway markings and runway hold lines are faded. These markings must be remarked in accordance with FAA AC 150/5340-1L, Standards for Airport Markings, Chapters 3 and 4. This is a repeat discrepancy.
- ➤ The runway, taxiways, and ramp pavements are raveling and cracking and must be addressed in the near future to prevent further deterioration and to enhance operational safety. This is a repeat discrepancy.

Happy Camp Airport

All Runway Hold Position Markings are faded and must be repainted in accordance with FAA AC 150/5340-1L, Standards for Airport Markings, Chapter 3. Also, old Runway Hold Position Markings located closer to the runway are visible. These markings must be obliterated to reduce confusion and enhance operational safety.



- Multiple trees, located north and northeast of the Runway 22 threshold, penetrate the 14 CFR Part 77, 20:1 Approach and 7:1 Transitional Surfaces and must be removed or topped.
- Plants and brush are located within the Taxiway Object Free Area of the parallel taxiway. These plants, shrubs and any other objects should be removed within 44.5 feet either side of the taxiway centerline in accordance with FAA AC 150/5300-13A, Airport Design, Chapter 4 and Appendix 7.
- Numerous trees, located southwest of the Runway 4 threshold, penetrate the 14 CFR Part 77, 20:1 Approach and 7:1 Transitional Surfaces and must be removed or topped.
- > A fence, brush, and trees north of the runway are located within approximately 120 feet of the runway centerline. These objects penetrate the FAR Part 77 Primary Surface (125 feet either side of the runway centerline and 200 feet prior to the runway), which must remain clear of obstructions above runway grade. These obstructions must be removed or relocated beyond the Primary Surface and do not conflict with the 14 CFR Part 77, 7:1 Transitional Surface.
- > The runway, taxiway, and ramp pavement continue to ravel and crack. The deteriorating pavement condition should be addressed in the near future to avoid pavement failure.
- During the inspection, a United States Forest Service (USFS) pick-up truck was observed driving across the runway, through the infield, and down the parallel taxiway to the USFS facility on the south side of the airport. Multiple tire tracks were observed on the runway, taxiway, and infield indicating unauthorized vehicles regularly operate on and adjacent to the active runway. Airport tenants needs to be discouraged from operating on the runway and taxiways, in order to reduce the risk of a runway incursion.

Scott Valley Airport (Inspection Date: January 31, 2019)

- A fence located approximately 150 feet from the approach end of Runway 34 penetrates the Runway Safety Area (RSA). To meet RSA standards, the fence must be relocated to a distance of not less than 240 feet from the beginning of the runway or made frangible in accordance with FAA AC 150/5300-13A, Airport Design, Section 307 and Appendix 7. This is a repeat discrepancy.
 - Alternatively, the runway threshold could be relocated and replace the existing displaced threshold, reducing the runway length to approximately 3,500 feet, to attain a 240-foot RSA and meet 14 CFR Part 77 standards. If this alternative is chosen, the airport's approved Airport Layout Plan (ALP) and 5010 must be updated and mark the runway in accordance with FAA AC 150/5340-1L, Standards for Airport Markings, Chapter 2, to reflect these changes. For this alternative, the runway lights must be relocated or installed in accordance with FAA AC 150/5340-30J, Design and Installation Details for Airport Visual Aids.
- > A Runway Hold Position Marking is missing for the run-up area located adjacent to the Runway 16 threshold. A Runway Holding Position Marking must be installed in accordance with FAA AC 150/5340-1L, Standards for Airport Markings, Chapter 3.
- > FAA 5010-1 Form indicates that the runway is 50 feet in width, while it was measured at 60 feet in width. Form 5010-1 must be updated. Revise applicable pilot guides to reflect the current runway configuration. This is a repeat discrepancy.
- The runway, taxiway, and apron pavements are beginning to ravel and should be addressed in the near future to prevent further deterioration.

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Weed Airport

- The runway holding position and runway lead-in markings are faded and must be remarked, in accordance with FAA AC 150/5340-1L, Standards for Airport Markings, Chapters 2 and 3.
- > Several blue taxiway edge reflectors are missing along the parallel taxiway. Reflectors are to be replaced and the interval spacing cannot exceed 200 feet, in accordance with FAA AC 150/5340-301, Design and Installation Details for Airport Visual Aids, Chapter 2.
- > The yellow taxiway centerline markings for three closed stub taxiways must be removed, and the three yellow "X"s must be refreshed.
- Extensive longitudinal, lateral, and alligator cracks along the taxiways and ramp must be crack sealed as soon as possible to avoid additional pavement damage.
- > Siskiyou County should consider installing a weather reporting station, such as an Automated Weather Observation System, that will enhance safety by allowing access to airport weather information during flight planning and while performing flight operations in the area.

Montague-Yreka Rohrer Field Airport

No inspection reports provided

Dunsmuir Municipal-Mott Airport

No inspection reports provided

3. Airport Capital Improvement Projects

Following are the existing airport capital improvement projects at the public-use, general aviation airports located in the County and included in the RAP, based on the 2020 FAA ACIP Submission.

Siskiyou County Airport

FFY 2020: ALP Update - \$60,000

Butte Valley Airport

No known capital improvement projects

Happy Camp Airport

No known capital improvement projects

Scott Valley Airport

> FFY 2020: ALP Update - \$60,000

Weed Airport

- FFY 2019: Taxiway and Parking Apron Rehab \$1,300,000 (Pending FAA Authorization)
- FFY 2020: ALP Update \$60,000
- > FFY 2020: AWOS Electrical \$150,000
- FFY 2022: Electrical Upgrade Final design \$100,000
- > FFY 2023: Electrical Upgrade Construction, Phase 1 \$544,716
- FFY 2024: Electrical Upgrade Construction, Phase 2 \$1,127,185

Montague-Yreka Rohrer Field Airport

No known capital improvement projects

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Dunsmuir Municipal-Mott Airport

- > FFY 2019: Aircraft Apron Reconstruct (Phase 1 Design) \$150,000
- > FFY 2020: Runway-Taxiway Reconstruction \$2,840,000
- > FFY 2021: Aircraft Apron Reconstruct (Phase 1 Construct) \$1,380,000
- > FFY 2022: Aircraft Apron Reconstruct (Phase 2 Design) \$80,000
- > FFY 2023: Aircraft Apron Reconstruct (Phase 2 Construct) \$750,000

4. Airports' Capital and Revenue Funding Sources

Following are the existing Airports' capital and revenue funding sources and the number of lessees at the public-use, general aviation airports located in the County and included in the RAP.

Table 5: Airports' Capital and Revenue Sources

	Siskiyou County	Butte Valley	Happy Camp	Scott Valley	Montague Yreka	Dunsmuir Municipal
Agricultural Land Rent	1	0	0	1	Unknown	Unknown
Hangar Space Rent	7	0	0	2	Unknown	Unknown
Aeronautical Land Rent	11	1	1	16	Unknown	Unknown
Ramp Rent	0	0	0	1	Unknown	Unknown
Non-Aeronautical	2	0	0	0	Unknown	Unknown
Land Rent						
Bunker Rent	4	0	0	0	Unknown	Unknown
Vehicle Parking Rent	1	0	0	0	Unknown	Unknown
Non-Aeronautical	1	0	0	0	Unknown	Unknown
Improvement Rent						
User Fees	Yes	Yes	Yes	Yes	Unknown	Unknown
State Grants	Yes	Yes	Yes	Yes	Yes	Yes
Federal Grants	Yes	No	No	Yes	No	No

Client: Siskiyou County Local Transportation Commission DRAFT 04/16/2020 Consultant Team: Aviation Management Consulting Group and Mead & Hunt



5. Airport Aeronautical Activity Levels

Following are the aeronautical activity levels of the public-use, general aviation airports located in the County and included in the RAP. It is important to note that the aircraft operations and based aircraft data have been derived from the FAA Master Record 5010-1 Form data. This data is reported by each of the airport sponsors on an annual basis to the FAA. Airports without an air traffic control tower, aircraft operations counting mechanism, or other aircraft operation counting system typically makes estimates of these activity levels.

Table 6: Siskiyou County Airport Aeronautical Activity Levels

	2018	2017	2016	2015	2014
Aircraft Operations ⁴					
Air Carrier ⁵	0	0	0	0	0
Air Taxi ⁶	150	150	150	150	150
General Aviation Local ⁷	7,500	7,500	7,500	7,500	7,500
General Aviation Itinerant ⁸	6,000	6,000	6,000	6,000	6,000
Military ⁹	100	100	100	200	200
TOTAL	13,750	13,750	13,750	13,850	13,850
Based Aircraft ¹⁰					
Single-Engine	17	17	20	20	20
Multi-Engine	1	1	0	0	0
Jet	0	0	0	0	0
Helicopter	0	0	0	0	0
Other (ultra-light/glider)	7	7	7	7	7
TOTAL	24	24	27	27	27
Fuel Volumes					
Jet Fuel	0	0	0	0	0
Avgas	0	0	0	0	0
TOTAL	0	0	0	0	0

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⁴ Aircraft Operations, the number of aircraft takeoffs or landings at the airport.

⁵ *Air Carrier Operations*, aircraft operations associated with scheduled passenger and air cargo aircraft operations (14 CFR Part 121).

⁶ *Air Taxi Operations*, aircraft operations associated non-scheduled passenger and air cargo aircraft operations (14 CFR Part 135).

⁷ **General Aviation Local Operations**, aircraft operations associated with civil aircraft (excluding air carrier, air taxi, and military aircraft) that remain in the local traffic pattern, execute simulated instrument approaches or low passes at the airport, and the aircraft operations to or from the airport and a designated practice area within a 20-mile radius of the airport.

⁸ **General Aviation Itinerant Operations**, aircraft operations associated with civil aircraft (excluding air carrier, air taxi, and military aircraft), either IFR, SVFR, or VFR, that lands at an airport, arriving from outside the airport area, or departs an airport and leaves the airport area.

⁹ Military Operations, aircraft operations associated with military aircraft

¹⁰ **Based Aircraft**, an aircraft which has been or will be stored at the airport for more than 183 calendar days over a one year period (including days that the aircraft is operating off the airport and not paying based aircraft storage rents or fees at another airport).



Table 7: Butte Valley Airport Aeronautical Activity Levels

	2018	2017	2016	2015	2014
Aircraft Operations					
Air Carrier	0	0	0	0	0
Air Taxi	0	0	0	0	0
General Aviation Local	50	50	50	50	50
General Aviation Itinerant	2,000	2,000	2,000	2,000	2,000
Military	0	0	0	0	0
TOTAL	2,050	2,050	2,050	2,050	2,050
Based Aircraft					
Single-Engine	1	1	1	1	1
Multi-Engine	0	0	0	0	0
Jet	0	0	0	0	0
Helicopter	0	0	0	0	0
Other	0	0	0	0	0
TOTAL	1	1	1	1	1
Fuel Volumes					
Jet Fuel	0	0	0	0	0
Avgas	0	0	0	0	0
TOTAL	0	0	0	0	0

Table 8: Happy Camp Airport Aeronautical Activity Levels

	2018	2017	2016	2015	2014
Aircraft Operations					
Air Carrier	0	0	0	0	0
Air Taxi	0	0	0	0	0
General Aviation Local	0	0	0	0	0
General Aviation Itinerant	150	150	250	250	250
Military	0	0	0	0	0
TOTAL	150	150	250	250	250
Based Aircraft					
Single-Engine	0	0	0	0	0
Multi-Engine	0	0	0	0	0
Jet	0	0	0	0	0
Helicopter	0	0	0	0	0
Other	0	0	0	0	0
TOTAL	0	0	0	0	0
Fuel Volumes					
Jet Fuel	0	0	0	0	0
Avgas	0	0	0	0	0
TOTAL	0	0	0	0	0

Client: Siskiyou County Local Transportation Commission DRAFT Consultant Team: Aviation Management Consulting Group and Mead & Hunt DRAFT 04/16/2020



Table 9: Scott Valley Airport Aeronautical Activity Levels

	2018	2017	2016	2015	2014
Aircraft Operations					
Air Carrier	0	0	0	0	0
Air Taxi	104	104	104	104	104
General Aviation Local	3,000	3,000	3,000	3,000	3,000
General Aviation Itinerant	5,000	5,000	5,000	5,000	5,000
Military	0	0	0	0	0
TOTAL	8,104	8,104	8,104	8,104	8,104
Based Aircraft					
Single-Engine	16	16	19	19	19
Multi-Engine	0	0	0	0	0
Jet	0	0	0	0	0
Helicopter	0	0	0	0	0
Other (ultra-light)	1	1	1	1	1
TOTAL	17	17	20	20	20
Fuel Volumes					
Jet Fuel	0	0	0	0	0
Avgas	Unknown	Unknown	Unknown	Unknown	Unknown
TOTAL	Unknown	Unknown	Unknown	Unknown	Unknown

Table 10: Weed Airport Aeronautical Activity Levels

	2018	2017	2016	2015	2014
Aircraft Operations					
Air Carrier	0	0	0	0	0
Air Taxi	150	150	150	200	200
General Aviation Local	4,000	4,000	4,000	6,000	6,000
General Aviation Itinerant	6,000	6,000	6,000	10,000	10,000
Military	0	0	0	0	0
TOTAL	10,150	10,150	10,150	16,200	16,200
Based Aircraft					
Single-Engine	12	12	12	12	12
Multi-Engine	2	2	3	3	3
Jet	0	0	0	0	0
Helicopter	0	0	0	0	0
Other	0	0	0	0	0
TOTAL	14	14	15	15	15
Fuel Volumes					
Jet Fuel	Unknown	Unknown	Unknown	Unknown	Unknown
Avgas	Unknown	Unknown	Unknown	Unknown	Unknown
TOTAL	Unknown	Unknown	Unknown	Unknown	Unknown

Client: Siskiyou County Local Transportation Commission DRAFT 04/16/2020 Consultant Team: Aviation Management Consulting Group and Mead & Hunt



Table 11: Montague-Yreka Rohrer Field Aeronautical Activity Levels

	2018	2017	2016	2015	2014
Aircraft Operations					
Air Carrier	0	0	0	0	0
Air Taxi	0	0	0	0	0
General Aviation Local	1,300	1,300	1,300	1,300	1,300
General Aviation Itinerant	2,500	2,500	2,500	2,500	2,500
Military	0	0	0	0	0
TOTAL	3,800	3,800	3,800	3,800	3,800
Based Aircraft					
Single-Engine	23	23	23	23	23
Multi-Engine	0	0	0	0	0
Jet	0	0	0	0	0
Helicopter	0	0	0	0	0
Other <i>(glider)</i>	2	2	2	2	2
TOTAL	25	25	25	25	25
Fuel Volumes					
Jet Fuel	0	0	0	0	0
Avgas	Unknown	Unknown	Unknown	Unknown	Unknown
TOTAL	Unknown	Unknown	Unknown	Unknown	Unknown

Table 12: Dunsmuir Municipal-Mott Airport Aeronautical Activity Levels

	2018	2017	2016	2015	2014
Aircraft Operations					
Air Carrier	0	0	0	0	0
Air Taxi	0	0	0	0	0
General Aviation Local	500	500	500	500	500
General Aviation Itinerant	1,700	1,700	1,700	1,700	1,700
Military	0	0	0	0	0
TOTAL	2,200	2,200	2,200	2,200	2,200
Based Aircraft					
Single-Engine	7	7	10	5	6
Multi-Engine	0	0	0	0	0
Jet	1	1	1	0	0
Helicopter	1	0	0	0	0
Other	0	0	0	0	0
TOTAL	9	8	11	5	6
Fuel Volumes					
Jet Fuel	0	0	0	0	0
Avgas	0	0	0	0	0
TOTAL	0	0	0	0	0

Client: Siskiyou County Local Transportation Commission DRAFT 04/16/2020 Consultant Team: Aviation Management Consulting Group and Mead & Hunt



6. Airport General Aviation Products, Services, and Facilities

Following are the general aviation products, services, and facilities at the public-use, general aviation airports located in the County and included in the RAP. The information is based on public sources and interviews with the airports' FBOs and SASOs.

Table 13: Siskiyou County Airports' General Aviation Products, Services, and Facilities

Airport Name	Siskiyou County Airport	Butte Valley Airport	Happy Camp Airport
FAA Airport Identifier	SIY	A32	36S
Number of FBOs	1	0	0
Number of SASOs	0	0	0
General Aviation Products and Service	s		
Aviation Fuels			N/A
Jet Fuel Full-Service/Self-Service Price	N/A	N/A	N/A
Avgas Full-Service/Self-Service Price	N/A \$5.85 ¹¹	N/A	N/A
Mogas Full-Service/Self-Service Price	N/A	N/A	N/A
Aircraft Services	None	None	None
Aircraft Ground Handling	None	None	None
Airframe MRO	None	None	None
Powerplant MRO	None	None	None
Propeller MRO	None	None	None
Radio and Instrument MRO	None	None	None
Paint	None	None	None
Interior	None	None	None
Other General Aviation Services	None	None	None
Aircraft Rental	None	None	None
Flight Training	None	None	None
Aircraft Management	None	None	None
Aircraft Charter	None	None	None
Aircraft Sales	None	None	None
Other	Agriculture		
Crew and Passenger Services	None	None	None
Other			
General Aviation Facilities			
General Aviation Terminal	Unknown	None	None
Community Hangars	4	None	None
Corporate Hangars	?	None	None
Executive Hangars	?	None	None
T-Hangars	10	None	3
Tiedowns	20	None	13
Shade Tiedowns	0	None	None

¹¹ Temporarily unavailable as of February 2020

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Table 13: Siskiyou County Airports' General Aviation Products, Services, and Facilities

Airport Name	Scott Valley Airport	Weed Airport
FAA Airport Identifier	A30	O46
Number of FBOs	1	1
Number of SASOs	0	0
General Aviation Products and Service	s	
Aviation Fuels		
Jet Fuel Full-Service/Self-Service Price	N/A	\$5.29 N/A
Avgas Full-Service/Self-Service Price	N/A \$5.75	N/A \$5.89
Mogas Full-Service/Self-Service Price	N/A	N/A
Aircraft Services	None	None
Aircraft Ground Handling	None	None
Airframe MRO	None	None
Powerplant MRO	None	None
Propeller MRO	None	None
Radio and Instrument MRO	None	None
Paint	None	None
Interior	None	None
Other General Aviation Services	None	None
Aircraft Rental	None	None
Flight Training	None	None
Aircraft Management	None	None
Aircraft Charter	None	None
Aircraft Sales	None	None
Other		
Crew and Passenger Services	None	None
Other		
General Aviation Facilities		
General Aviation Terminal	Yes	Yes
Community Hangars	1 (?)	1
Corporate Hangars	None	None
Executive Hangars	7	13
T-Hangars	9	4
Tiedowns	10	30
Shade Tiedowns	None	None
Other	None	None



Table 13: Siskiyou County Airports' General Aviation Products, Services, and Facilities

Airport Name	Montague Airport-Yreka Rohrer Field	Dunsmuir Municipal-Mott Airport
FAA Airport Identifier	105	106
Number of FBOs	1	0
Number of SASOs	1	0
General Aviation Products and Service	s	
Aviation Fuels		
Jet Fuel Full-Service/Self-Service Price	N/A	N/A
Avgas Full-Service/Self-Service Price	N/A \$5.85	N/A
Mogas Full-Service/Self-Service Price	N/A	N/A
Aircraft Services	None	None
Aircraft Ground Handling	Minor	None
Airframe MRO	Minor	None
Powerplant MRO	Minor	None
Propeller MRO	None	None
Radio and Instrument MRO	None	None
Paint	None	None
Interior	None	None
Other General Aviation Services	None	None
Aircraft Rental	None	None
Flight Training	None	None
Aircraft Management	None	None
Aircraft Charter	None	None
Aircraft Sales	None	None
Other		
Crew and Passenger Services	None	None
Other		
General Aviation Facilities		
General Aviation Terminal	Yes	None
Community Hangars	1	2
Corporate Hangars	None	None
Executive Hangars	13	13
T-Hangars	2	None
Tiedowns	15	17
Shade Tiedowns	None	None
Other	None	None



7. Airport Non-Aeronautical Uses

Following are the known non-aeronautical uses at the public-use, general aviation airports located in the County and included in the RAP. Inspections of hangars and improvements were not conducted. Therefore, there may be additional unknown non-aeronautical uses of Airports' land and improvements.

Siskiyou County Airport

There are 27 separate agricultural fields identified on the airport that are either currently being used or may be available for use. Currently, the County is leasing 790 acres of land to 4C Farming – Dan Chase and Family for growing cops of oats, wheat, hay, alfalfa, and/or barley.

Table 14: Siskiyou County Airport Agricultural Fields

Field	Acreage	Notes
Field 1	12.1	Lessee: 4C Farming
Field 2	53.6	Lessee: 4C Farming
Field 3	34.1	Lessee: 4C Farming
Field 4	14.2	Lessee: 4C Farming
Field 5	138.2	Lessee: 4C Farming
Field 6	1.5	Lessee: 4C Farming
Field 7	3.1	Lessee: 4C Farming
Field 8	26.6	Lessee: 4C Farming
Field 9	1.0	Retained
Field 10	69.0	Lessee: 4C Farming
Field 11	42.2	Lessee: 4C Farming
Field 12	100.3	Lessee: 4C Farming
Field 13	28.4	Lessee: 4C Farming
Field 14	35.4	Lessee: 4C Farming
Field 15	31.2	Lessee: 4C Farming
Field 16	5.7	Lessee: 4C Farming
Field 17	6.4	Lessee: 4C Farming
Field 18	11.0	Lessee: 4C Farming
Field 19	25.3	Lessee: 4C Farming
Field 20	7.0	Lessee: 4C Farming
Field 21	38.5	Lessee: 4C Farming
Field 22	6.5	Lessee: 4C Farming
Field 23	7.5	Lessee: 4C Farming
Field 24	42.1	Lessee: 4C Farming
Field 25	??	??
Field 26	19.3	Lessee: 4C Farming
Field 27	23.8	Lessee: 4C Farming

- Other known non-aeronautical uses of the airport include land rental (Siskiyou County agency) bunker rentals (Siskiyou County agency and other municipalities), vehicle parking (private entity), and a gym (private entity).
- The County has also advertised 450 acres of airport land currently designated for agricultural fields as available for industrial development.



Butte Valley Airport

- There are no known non-aeronautical uses of the airport.
- There is substantial airport land available for non-aeronautical uses, but with limited infrastructure.
- While the airport land is currently not being utilized for agricultural purposes, there is land across highway 97 that is being used for agricultural purposes.

Happy Camp Airport

- > There are no known non-aeronautical uses of the airport.
- ➤ There is limited land that is available for non-aeronautical uses.

Scott Valley Airport

- Currently, the County is leasing 33 acres of land to Hanna Brothers for agricultural purposes.
- > There are no other known non-aeronautical uses of the airport.
- There is limited land (including the 33 acres of agricultural land) that is available for non-aeronautical uses.

Weed Airport

- > There are no known non-aeronautical uses of the airport.
- There is land available for non-aeronautical uses, but with limited infrastructure.

Montague-Yreka Rohrer Field Airport

- > There are no known non-aeronautical uses of the airport.
- > There is land available for non-aeronautical uses, but with limited infrastructure.

Dunsmuir Municipal-Mott Airport

- ➤ There are no known non-aeronautical uses of the airport.
- > There is no land available for non-aeronautical uses.

I. SISKIYOU COUNTY AIRPORT LAND USE COMPATIBILITY PLAN

The Siskiyou County Airport Land Use Commission (SCALUC) was established in June 1988. The current Siskiyou County Airport Land Use Compatibility Plan (ALUC) was adopted by the SCALUC on July 10, 2001, and is out of date.

The California Airport Land Use Planning Handbook recommends that ALUC's undergo a comprehensive review and update every five years.

"Incompatible land uses around airports are considered the largest imminent and continuous threat to California aviation..."

– California Aviation System

Therefore, it is recommended that the SCALUC undertake a review and update of the current ALUC to ensure that the compatibility criteria and policies adequately reflect current public health and safety concerns and needs.

J. AIRPORT PROFILES

The prior tables in this section provide a side-by-side comparison of the Airports' influencing factors. The following airport profiles consolidates this information on an airport by airport basis.



Table 15: Siskiyou County Airport Profile



MAJOR FEATURES

Property

4 miles northeast of Montague, California

Acres: 1,080

Nonaviation uses/potential - Moderate

Airfield

Airport Elevation: 2,651.1' Runway: 17/35 7,490' X 150' Airport Reference Code: C-III Taxiway Design Group 3 (50' wide)

Pavement Strength: in pounds (Gear Type) 60,000(S),

180,000(D), 270,000(DTWG)

Lighting

Runway Lighting: Medium Intensity Runway Lights Glideslope Guidance: Precision Approach Path Indicators Runway End Identifier Lights: Runway 17 and 35

Rotating Beacon

Navigational Aids / Instrument Approaches

Wind Indicator, Non-Directional Beacon / GPS-A Approach.

Approach minimums 1200' ceiling with 1 1/4 mile visibility.

BUILDING AREA

<u>Location</u>: Fuel island, FBO, and USFS apron on the west side of Airport midfield, adjacent to Airport road.

<u>Aircraft Parking Capacity:</u> Tie downs – Two areas with 23 tiedown spaces; West Side Hangars: 9 T-Hangars, 4 box hangars; South Side Hangars: 8 hangars located on closed runway.

<u>Industrial:</u> East Side: Storage and materials laydown yard located on closed runway.

Agricultural: Ag land lease on infields and east, west, and south side of runway.

NONSTANDARD CONDITIONS

The Runway 35 Safety Area has a road in it. The Runway 17 Runway Protection Zone has a road in it. Taxiway Geometry at Runway 17 threshold The property under the RPZ is not owned by the Airport.

SERVICES

Fixed Base Operations Services

FBO RPQ in May 2019 had no selectees – not staffed Fuel: 100L and Jet A (Self-Serve Only)

Pilots lounge / flight planning

ROLES

Recreation/personal business, USFS Fire attack, Corporate use, Medical transport, Sailplanes.

OPERATIONS ACTIVITY

Number of Operations - 13,650

Based Aircraft - 25

Seasonal USFS Fire Base – Helicopters and Single Engine Air Tankers. Occasionally larger tankers as needed.

FINANCIAL

Airport Generated Revenue

Fiscal Year 2018-2019: \$90,470

Planned Capital Improvement

Year	Project	Total Costs
2020	ALP Update	\$60,000

AIRPORT SITE AND ENVIRONS

<u>Topography:</u> Flat valley bowl with rising terrain to the west and north.

Access: I-5 runs north to south along Klamath River valley 5 miles to the west. From Yreka, Highway 263 (CA Hwy 3) east to Yreka Ager Road, then northeast to Shelley Road. From Montague, Airport Road north.

Land Use Jurisdictions: Siskiyou County

<u>Nearby Land Uses:</u> Unirrigated grassland, agriculture, cattle grazing, no Incompatible land uses in the vicinity of airport, no terrain or obstructions along extended runway centerline.



Table 16: Butte Valley Airport Profile



MAJOR FEATURES

Property

5 miles south of Dorris, California

Acres: 234

Nonaviation uses/potential - Low

Airfield

Airport Elevation: 4,243.1 MSL Runway: 16/34 - 4,300 x 60' Airport Reference Code: B-I (Small)

Taxiway Design Group: N/A

Pavement Strength: In Pounds (Gear Type)

30,000 (Single)

Lighting

Rotating Beacon

Runway Lighting: Medium Intensity Runway Lights

Glideslope Guidance: None

Navigational Aids / Instrument Approaches

Wind indicator

Only visual approaches

BUILDING AREA

Location: Access via Highway 97, Gravel road

<u>Aircraft Parking Capacity</u>: Tiedowns – 6 tiedowns, one hangar, segmented circle.

NONSTANDARD CONDITIONS

The Runway 16 RPZ has roads through it. The Runway 34 RPZ has Highway 97 through it. The Taxiway lighting is nonstandard.

SERVICES

No fixed base operator Fuel: None

ROLES

Agricultural applicators
Recreation/personal business

OPERATIONS ACTIVITY

Number of Operations – 1,050

Based Aircraft - 0

FINANCIAL

Airport Generated Revenue

Fiscal year 2018-2019: \$10,619

Planned Capital Improvements

None identified

AIRPORT SITE AND ENVIRONS

<u>Topography:</u> Located in the center of Butte Valley basin with rising terrain predominantly to the northeast and southwest.

Access: 25 miles south on Hwy 97 from Klamath Falls, Oregon; approximately 5 miles south of Dorris, California; approximately 40 miles north on Hwy 87 from Weed, California; about 45 miles from Interstate 5.

Land Use Jurisdiction: Siskiyou County

Nearby Land Uses: Dry scrub land, agriculture. No incompatible land uses.

<u>Development Constraints:</u> Road- and fence-controlled obstructions 350' and 520' from the runway ends.



Table 17: Happy Camp Airport Profile



MAJOR FEATURES

Property

West of central Happy Camp, CA

Acres: 64

Nonaviation uses/potential - Low

Airfield

Airport Elevation: 1,209 MSL Runway: 16/34: 3,000' x 50'

Airport Reference Code: B-I (Small) Taxiway Design Group: 1A (20' wide) Pavement Strength: In Pounds (Gear Type)

30,000 (Single)

Lighting

Runway Lighting: none Glideslope Guidance: none

Rotating Beacon

Navigational Aids / Instrument Approaches

Wind Indicator Visual Only

BUILDING AREA

Location: Access from Highway 96 via Airport Road.

Aircraft Parking Capacity: 4 tiedown spaces, 4 helicopter spaces, 1 hangar, 3 buildings.

NONSTANDARD CONDITIONS

The parallel taxiway separation centerline to centerline is 80' B-I (Small Standard is 150'. The Holding Position separation from centerline is 70'; the B-I (Small) standard is 125'

The Runway 4 RPZ has an access road through it. The Runway 22 RPZ has trees.

There is an aggregate yard in the Taxiway Safety Area.

SERVICES

No fixed base operator

Fuel: None

ROLES

Recreation/personal business Fire attack base

OPERATIONS ACTIVITY

Number of Operations - 150 Based Aircraft – 1 helicopter

FINANCIAL

Airport Generated Revenue

Fiscal Year 2018-2019: \$435

Planned Capital Improvement

None identified.

AIRPORT SITE AND ENVIRONS

Topography: Located on the north side of a narrow valley associated with the Klamath River. There is rising forested terrain in all directions.

Access: Adjacent to the center of Happy Camp, CA and is accessible via Highway 96. It is 65 miles from Interstate 5

Land Use Jurisdiction: Siskiyou County

Nearby Land Uses: Mixture of single-family residential and commercial uses. Mini storage facility north of the airfield. Commercial uses within the approach to Runway 22

Development Constraints: Trees less than 200 feet east of Runway 4 threshold. Lower Airport Road 620' from end of Runway 4. Possible through the fence use from storage areas to the west. Steep terrain on either side of runway.



Table 18: Scott Valley Airport Profile



MAJOR FEATURES

Property

2.6 miles south of Ft Jones, CA

Acres: 53

Nonaviation uses/potential - Low

Airfield

Airport Elevation: 2,728.0' MSL Runway: 16/34: 3,700 x 50'

Airport Reference Code: B-I (Small)

Taxiway Design Group: N/A

Pavement Strength: In Pounds (Gear Type)

12,000 (Single)

Lighting

Runway Lighting: Medium Intensity Runway

Lights

Glideslope Guidance: None

Rotating Beacon

Navigational Aids / Instrument Approaches

Wind Indicator

Only visual approaches

BUILDING AREA

<u>Location</u>: Fuel island, Aprons, and USFS apron on the east side Airport, adjacent to Island Road.

Aircraft Parking Capacity: Tie downs – Two areas with 12 tiedown spaces; East Side Hangars: 9 T-Hangars, 7 box hangars; West Side: dry grass lands. No development.

NONSTANDARD CONDITIONS

The RPZs have dirt access roads through them. The RPZ area is not all owned by the Airport.

SERVICES

No fixed base operator Fuel: 100LL (Self-Serve)

ROLES

Recreation/personal business USFS Fire attack

OPERATIONS ACTIVITY

Number of Operations - 8,104

Based Aircraft - 17

Seasonal USFS Fire Base – Helicopters (although most now staged on ag lands adjacent to airport)

FINANCIAL

Airport Generated Revenue

Fiscal Year 2018-2019: \$27.767

Planned Capital Improvement

Year	Project	Total Costs
2020	ALP Update	\$60,000

AIRPORT SITE AND ENVIRONS

<u>Topography:</u> Located on a flat valley floor with sharply rising terrain within two miles to the north, east, and southeast.

<u>Access:</u> South from Fort Jones on Eastside Road, then west and south on Island Road. North from Etna on Hwy 3 to Serpa Lane, then south on Island Road.

Land Use Jurisdiction: Siskiyou County

<u>Nearby Land Uses:</u> Irrigated cropland, rural residences. No incompatible land uses in approaches.

<u>Development Constraints:</u> Tree obstruction 710' away and 160' left of the extended runway centerline. Farm access roads at either end of the runway.

Consultant Team: Aviation Management Consulting Group and Mead & Hunt



Table 19: Weed Airport Profile



MAJOR FEATURES

Property

4.5 miles NW of Weed, California

Acres: 344

Nonaviation potential - Limited

Airfield

Airport Elevation: 2,942.7' MSL Runway: 14/32: 5,000' x 60'

Airport Reference Code: B-I (Small) Taxiway Design Group: 1 (25' wide) Pavement Strength: In Pounds (Gear Type)

12,000 (Single)

Lighting

Runway Lighting: MIRL

Glideslope Guidance: Visual Approach

Slope Indicators Rotating Beacon

Navigational Aids / Instrument

Approaches

Wind Indicator

RNAV GPS Runway 14

Approach minimums 500' ceiling with 1-mile

visibility

BUILDING AREA

<u>Location</u>: Fuel island, FBO, and USFS apron on the southwest side of the Airport, adjacent to Airport road.

Aircraft Parking Capacity: Tie downs – Two areas with 32 tiedown spaces; West Side Hangars: 4 T-Hangars, 13 box hangars; East Side: dry grass lands (no development)

NONSTANDARD CONDITIONS

RPZ has a road through it, Nonstandard taxiway lighting.

SERVICES

Fixed Base Operations Services

Eagles Nest Aviation

Fuel: 100L and Jet A (Self-Serve & Full Service)

Pilots lounge / flight planning

Courtesy Car

ROLES

Recreation, personal business, and corporate use

USFS Fire attack Medical transport

OPERATIONS ACTIVITY

Number of Operations – 10,150

Based Aircraft - 12

Seasonal USFS Fire Base - Helicopters and SE Air Tankers

FINANCIAL

Airport Generated Revenue

Fiscal Year 2018-2019: \$36,014

Planned Capital Improvement

Year	Project	Cost
2019	Taxiway and Parking Apron Rehab	\$1,300,000
2020	ALP Update	\$60,000
2020	AWOS Electrical	\$150,000
2022	Electrical Upgrade – Final Design	\$100,000
2023	Electrical Upgrade – Construction, Phase 1	\$544,716
2023	Electrical Upgrade – Construction, Phase 2	\$1,127,185

AIRPORT SITE AND ENVIRONS

<u>Topography:</u> Located on a flat valley floor with rising terrain to the west and east. The closest hills are about 4 miles to the west.

<u>Access:</u> I-5 runs north to south immediately to the west of the Airport with off-ramp access from both sides of the highway.

Land Use Jurisdiction: Siskiyou County

<u>Nearby Land Uses:</u> Undeveloped land, irrigated cropland, highway rest stop. No incompatible land uses in approaches.

<u>Development Constraints:</u> Controlled obstruction (Road) 900' north along the extended runway centerline.



Table 20: Montague-Yreka Rohrer Field Airport Profile



MAJOR FEATURES

Property

0.6 mile west of Montague California

Acres: 90

Nonaviation potential - Limited

Airfield

Airport Elevation: 2517 MSL Runway: 15/33: 3,360' x 50' Runway 5/23 (Turf): 2,080' x 100' Airport Reference Code: B-I (Small) Taxiway Design Group: 1B (30' wide) Pavement Strength: In Pounds (Gear Type)

12,000 (Single)

Lighting

Runway Lighting: MIRL Glideslope Guidance: VASI

Rotating Beacon

Navigational Aids / Instrument Approaches

Wind Indicator Segmented Circle Only visual approaches

BUILDING AREA

<u>Location</u>: Access from Highway 3 (Montague Road), west of the City of Montague

<u>Aircraft Parking Capacity</u>: 8 tiedown spaces, 2 helicopter spaces. East Side of Runway: 2 T hangars, 5 box hangars, FBO office. West Side of Runway (Through the Fence): 9 Box hangars, Industrial, storage.

NONSTANDARD CONDITIONS

The portion of parallel taxiway separation centerline to centerline is 110' B-I (Small); the standard is 150'.

The Holding Position separation from centerline is 92'; B-I (Small) standard is 125'.

Through the fence taxilane access does not connect to the runway end (FAA Guidelines).

The Runway 33 RPZ has road through it 350' from the runway end.

The Land under the RPZ is not fully owned/easement.

SERVICES

Fixed Base Operations Services

Steelman Aviation
Minor Airframe
Minor Powerplant
Aircraft rental, Glider, Aircraft tow, Instruction
Fuel: 100LL (Self-Serve)

ROLES

Recreation/personal business Small-package cargo Gliders Law enforcement

OPERATIONS ACTIVITY

Number of Operations – 3,800 Based Aircraft – 23, (2 gliders) Right Traffic to Runway 15 & Runway 23

FINANCIAL

Airport Generated Revenue

Fiscal Year 2018-2019: Unknown

Planned Capital Improvement

None identified

AIRPORT SITE AND ENVIRONS

<u>Topography:</u> Located between three hills with rising terrain immediately to the east and west.

Access: 1 mile west of the City of Montague on Montague Road. 5 miles east of Yreka on Montague Road. 5 miles east of Interstate 5.

Land Use Jurisdiction: City of Montague

<u>Nearby Land Uses:</u> Dry grassland, grazing, Agriculture. No incompatible land uses in the approaches.

<u>Development Constraints:</u> Montague Road through the Runway 33 RPZ. There is a creek bed on the west side of the runway.



Table 21: Dunsmuir Municipal-Mott Airport Profile



MAJOR FEATURES

Property

2.5 south from Mt Shasta, California

Acres: 126

Nonaviation uses/potential - low

Airfield

Airport Elevation: 2517 MSL Runway: 14/32: 2,800' x 60'

Airport Reference Code: B-I (Small) Taxiway Design Group: 1B (25' wide) Pavement Strength: In Pounds (Gear Type)

12,500 (Single)

Lighting

Runway Lighting: None Glideslope Guidance: VASI

Rotating Beacon

Navigational Aids / Instrument Approaches

Wind Indicator Segmented Circle Only visual approaches Right Traffic to Runway 14 due to terrain

BUILDING AREA

Location: Access via Mott Airport Road

<u>Aircraft Parking Capacity</u>: 17 tiedown spaces, 13 small box hangars, 2 large box hangars, 1 building/business office

NONSTANDARD CONDITIONS

Daytime use only

Runway 14/32 RPZs have roads through them Runway 32 Runway Safety Area grading (terrain)

Segmented circle within the Runway OFA Trees penetrate approach slope 1900' from runway end

Access road enters directly onto taxiway/apron

SERVICES

No fixed base operator

Fuel: None

ROLES

Recreation/personal business

OPERATIONS ACTIVITY

Number of Operations – 2,200 Based Aircraft – 9, (1 Helicopter, 1 Jet)

FINANCIAL

Airport Generated Revenue

(3-year avg) 2016-2019: \$23,973

Planned Capital Improvement

Year	Project	Cost
2020	Aircraft Apron Reconstruct (Phase 1 Design)	\$150,000
2020	Runway-Taxiway Reconstruction	\$2,840,000
2021	Aircraft Apron Reconstruct (Phase 1 Construct)	\$1,380,000
2022	Aircraft Apron Reconstruct (Phase 2 Design)	\$80,000
2023	Aircraft Apron Reconstruct (Phase 2 Construct)	\$750,000

AIRPORT SITE AND ENVIRONS

<u>Topography:</u> Located in mountainous foothills southwest of Mount Shasta with rising terrain immediately to the east and high mountain terrain in all directions.

Access: 5 miles north of the center of the City of Dunsmuir, 1 mile from Interstate 5.

Land Use Jurisdiction: City of Dunsmuir

<u>Nearby Land Uses:</u> Forested foothills, residences 250 feet west of runway centerline. No development in approaches.

<u>Development Constraints:</u> Access road through the Runway 14 RPZ/rising terrain, Mott Airport Road though the Runway 32 RPZ in rising terrain. Mott Airport Road parallels the west side of the runway with residences on west side. Steep rising terrain to east.



K. SISKIYOU COUNTY AIRCRAFT AND PILOTS

Following are the number of registered aircraft and licensed pilots in the United States, State of California, and Siskiyou County. The information is based on FAA registered aircraft owners' data and FAA licensed pilots' data.

Table 22: Number of Registered Aircraft

Location	Population	Registered Aircraft	Average per 1,000 persons	Market Share
United States	329,450,000	310,004	0.94	
State of California	39,510,000	25,756	0.65	8.3%
Siskiyou County	43,530	110	2.53	0.4%

While there are more registered aircraft per 1,000 persons in Siskiyou County than in the State of California or the United States, because there are more airports in the County than most counties with similar populations, this dilutes the value of the higher number of registered aircraft per person.

Table 23: Number of Licensed Pilots

Location	Population	Licensed Pilots	Average per 1,000 persons	Market Share
United States	329,450,000	627,181	1.90	
State of California	39,510,000	64,605	1.64	10.3%
Siskiyou County	43,530	129	2.97	0.2%

While there are more licensed pilots per 1,000 persons in Siskiyou County than in the State of California or the United States, because there are more airports in the County than most counties with similar populations, this dilutes the value of the higher number of licensed pilots per person.



L. SISKIYOU COUNTY DEMOGRAPHICS

Table 24: Siskiyou County Demographics

ltem	Information
Demographics	
Population	43,530 (0.32% decline)
Median Age	47.9
Median Household Income	\$40,884 (6.13% 1-year growth)
Per Capita Income	\$17,570
Poverty Rate	20.7%
Number of Employees	16,544 (1.87% growth)
Unemployment	6.3%
Housing Units	24,214 (65.6% owner occupied)
Housing Median Value	\$176,600
Educational Characteristics	
High School (or higher)	90%
Bachelor Degree (or higher)	22.5%
Educational Institutions	
Community College	Yes – College of the Siskiyous
State College / University	No
Private College / University	No
Employment Segments (largest)	
Health Care & Social Assistance	2,530 employees (15.3%)
Retail Trade	2,003 employees (12.1%)
Ag, Forestry, Fishing, & Hunting	1,765 employees (10.7%)
Educational Services	1,654 employees (10.0%)
Transportation Infrastructure	
Principal Arterials	Interstate 5 connects Siskiyou County to Redding and Sacramento, California to the south & Medford and Portland, Oregon to the north State Route 139 connects Siskiyou County with Modoc and Lassen Counties to the east US Route 97 connects the communities of Dorris and Mt. Hebron with Klamath Falls and Bend, Oregon State Route 89 connects Siskiyou County with Shasta, Tehama, Plumas, Sierra, Nevada, Placer, Eldorado, Alpine, and Mono counties
Railroad	None
Public Transit	Siskiyou Transit and General Express (STAGE)
Weather / Climate	
Temperatures	Summer High: 89° F (July); Winter Low 27° F (January)
Precipitation	Average annual precipitation: 29" rainfall; 24"snowfall



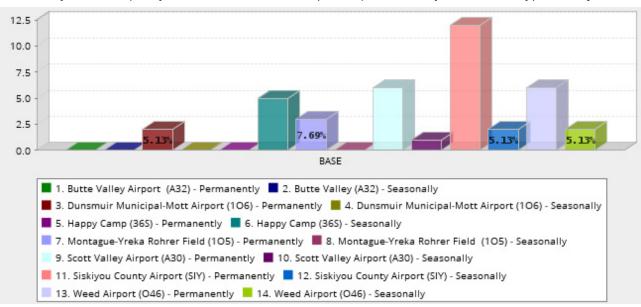
M. SURVEY RESULTS

A total of 162 surveys were sent to registered aircraft owners and licensed pilots located in Siskiyou County. The survey had a total of 59 responses, which provides statically relevant response rate with a 95% confidence level and a 5% margin of error.

Q. Do you have an aircraft based (either permanently or seasonally) at a public-use, general aviation airport in Siskiyou County? **59** responses

	Answer	Count	Percent
1.	Yes	36	61.02%
2.	No	23	38.98%

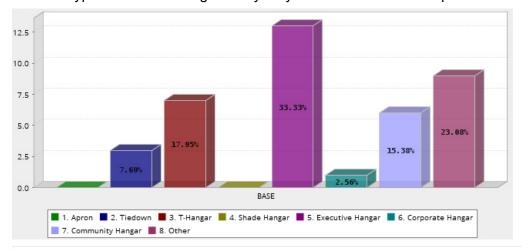
Q. Identify which airport your aircraft is based at (either permanently or seasonally). 39 responses



	Answer	Count	Percent
1.	Butte Valley Airport (A32) - Permanently	0	0.00%
2.	Butte Valley (A32) - Seasonally	0	0.00%
3.	Dunsmuir Municipal-Mott Airport (106) - Permanently	2	5.13%
4.	Dunsmuir Municipal-Mott Airport (106) - Seasonally	0	0.00%
5.	Happy Camp (36S) - Permanently	0	0.00%
6.	Happy Camp (36S) - Seasonally	5	12.82%
7.	Montague-Yreka Rohrer Field (105) - Permanently	3	7.69%
8.	Montague-Yreka Rohrer Field (105) - Seasonally	0	0.00%
9.	Scott Valley Airport (A30) - Permanently	6	15.38%
10.	Scott Valley Airport (A30) - Seasonally	1	2.56%
11.	Siskiyou County Airport (SIY) - Permanently	12	30.77%
12.	Siskiyou County Airport (SIY) - Seasonally	2	5.13%
13.	Weed Airport (O46) - Permanently	6	15.38%
14.	Weed Airport (O46) - Seasonally	2	5.13%



Q. What type of aircraft storage facility do you rent/utilize at the airport selected? 39 responses



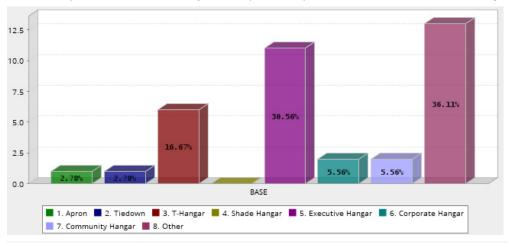
	Answer	Count	Percent
1.	Apron	0	0.00%
2.	Tiedown	3	7.69%
3.	T-Hangar	7	17.95%
4.	Shade Hangar	0	0.00%
5.	Executive Hangar	13	33.33%
6.	Corporate Hangar	1	2.56%
7.	Community Hangar	6	15.38%
8.	Other	9	23.08%

Q. Would you like to rent/utilize a different type of aircraft storage facility? 39 responses

	Answer	Count	Percent
1.	Yes	4	10.26%
2.	No	35	89.74%

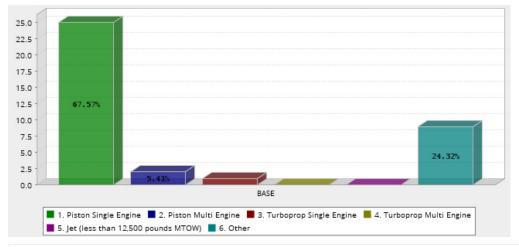


Q. What type of aircraft storage facility would you like to rent/utilize? 36 responses



	Answer	Count	Percent
1.	Apron	1	2.78%
2.	Tiedown	1	2.78%
3.	T-Hangar	6	16.67%
4.	Shade Hangar	0	0.00%
5.	Executive Hangar	11	30.56%
6.	Corporate Hangar	2	5.56%
7.	Community Hangar	2	5.56%
8.	Other	13	36.11%

Q. What type of aircraft do you own and/or operate? 37 responses



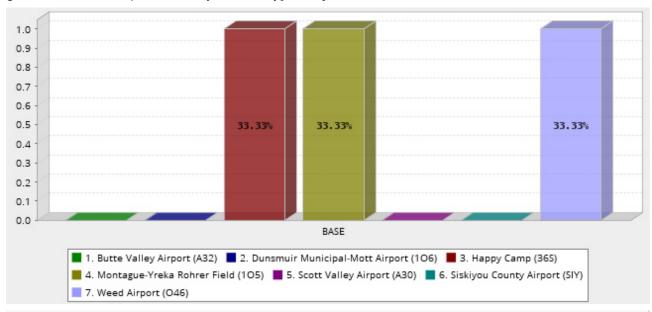
	Answer	Count	Percent
1.	Piston Single Engine	25	67.57%
2.	Piston Multi Engine	2	5.41%
3.	Turboprop Single Engine	1	2.70%
4.	Turboprop Multi Engine	0	0.00%
5.	Jet (less than 12,500 pounds MTOW)	0	0.00%
6.	Other	9	24.32%



Q. Do you rent or operate aircraft at a public-use, general aviation airport in Siskiyou County? [These responses are from survey respondents that do not have an aircraft based (either permanently or seasonally) at a public-use, general aviation airport in Siskiyou County] **11 responses**

	Answer	Count	Percent
1.	Rent	7	63.64%
2.	Operate	4	36.36%

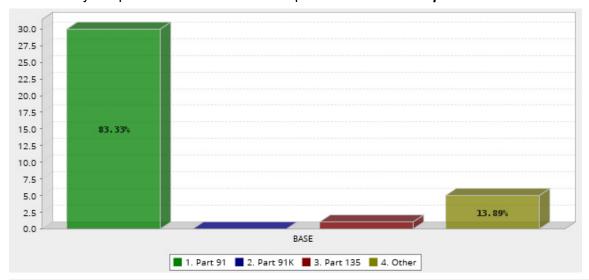
Q. Identify which airport you primarily rent or operate aircraft from. [These responses are from survey respondents that do not have an aircraft based (either permanently or seasonally) at a public-use, general aviation airport in Siskiyou County] *3 responses*



	Answer	Count	Percent
1.	Butte Valley Airport (A32)	0	0.00%
2.	Dunsmuir Municipal-Mott Airport (106)	0	0.00%
3.	Happy Camp (36S)	1	33.33%
4.	Montague-Yreka Rohrer Field (105)	1	33.33%
5.	Scott Valley Airport (A30)	0	0.00%
6.	Siskiyou County Airport (SIY)	0	0.00%
7.	Weed Airport (O46)	1	33.33%

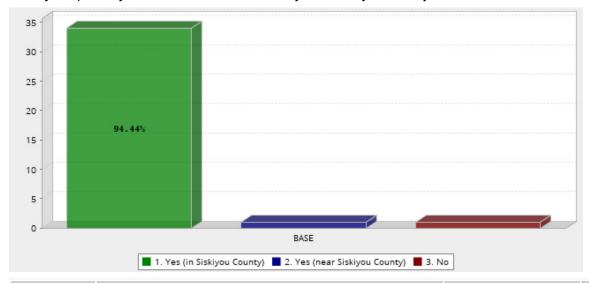


Q. How do you operate aircraft out of the airport selected? 36 responses



	Answer	Count	Percent
1.	Part 91	30	83.33%
2.	Part 91K	0	0.00%
3.	Part 135	1	2.78%
4.	Other	5	13.89%

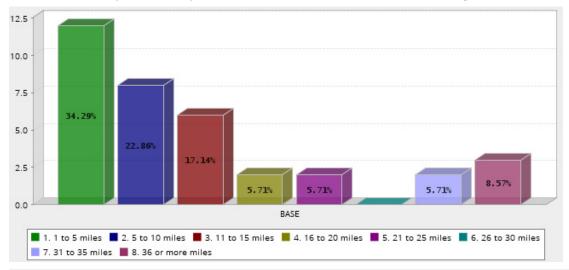
Q. Is your primary residence in or near Siskiyou County? 36 responses



	Answer	Count	Percent
1.	Yes (in Siskiyou County)	34	94.44%
2.	Yes (near Siskiyou County)	1	2.78%
3.	No	1	2.78%



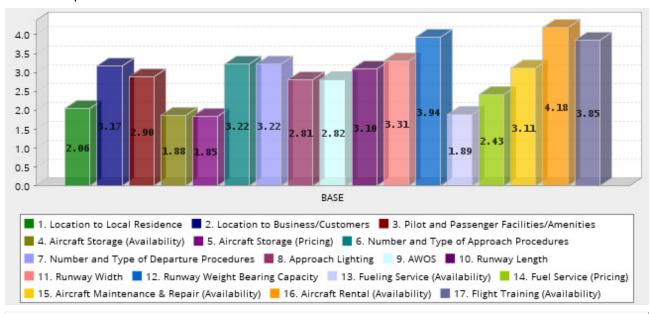
Q. How close is your primary residence to the airport selected? 35 responses



	Answer	Count	Percent
1.	1 to 5 miles	12	34.29%
2.	5 to 10 miles	8	22.86%
3.	11 to 15 miles	6	17.14%
4.	16 to 20 miles	2	5.71%
5.	21 to 25 miles	2	5.71%
6.	26 to 30 miles	0	0.00%
7.	31 to 35 miles	2	5.71%
8.	36 or more miles	3	8.57%



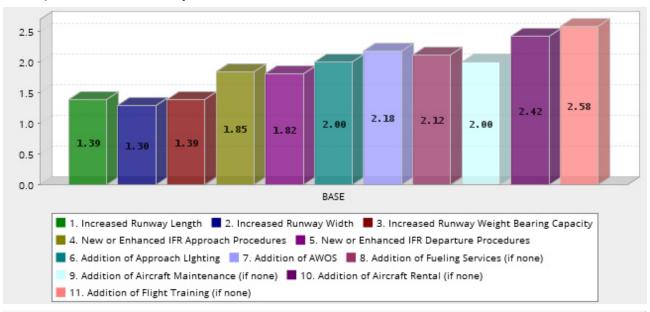
Q. Please rate each of the following airport attributes based on their importance for the reason you use the airport selected.



	Question	Count	Score	
1.	Location to Local Residence	33	2.061	
2.	Location to Business/Customers	23	3.174	
3.	Pilot and Passenger Facilities/Amenities	29	2.897	
4.	Aircraft Storage (Availability)	32	1.875	
5.	Aircraft Storage (Pricing)	27	1.852	
6.	Number and Type of Approach Procedures	23	3.217	
7.	Number and Type of Departure Procedures	23	3.217	
8.	Approach Lighting	26	2.808	
9.	AWOS	28	2.821	
10.	Runway Length	31	3.097	
11.	Runway Width	32	3.312	
12.	Runway Weight Bearing Capacity	31	3.935	
13.	Fueling Service (Availability)	28	1.893	
14.	Fuel Service (Pricing)	28	2.429	
15.	Aircraft Maintenance & Repair (Availability)	27	3.111	
16.	Aircraft Rental (Availability)	33	4.182	
17.	Flight Training (Availability)	33	3.848	



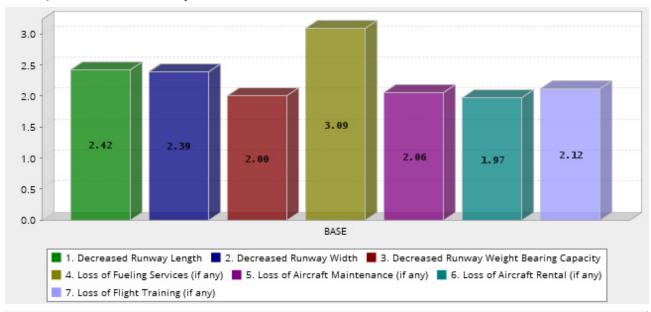
Q. What impact would the following scenarios have on the number of aircraft landings you have at the airport selected? **33 responses**



	Question	Score	
1.	Increased Runway Length	1.394	
2.	Increased Runway Width	1.303	
3.	Increased Runway Weight Bearing Capacity	1.394	
4.	New or Enhanced IFR Approach Procedures	1.848	
5.	New or Enhanced IFR Departure Procedures	1.818	
6.	Addition of Approach Lighting	2.000	
7.	Addition of AWOS	2.182	
8.	Addition of Fueling Services (if none)	2.121	
9.	Addition of Aircraft Maintenance (if none)	2.000	
10.	Addition of Aircraft Rental (if none)	2.424	
11.	Addition of Flight Training (if none)	2.576	



Q. What impact would the following scenarios have on the number of aircraft landings you have at the airport selected? **33** *responses*



	Question	Score	
1.	Decreased Runway Length	2.424	
2.	Decreased Runway Width	2.394	
3.	Decreased Runway Weight Bearing Capacity	2.000	
4.	Loss of Fueling Services (if any)	3.091	
5.	Loss of Aircraft Maintenance (if any)	2.061	
6.	Loss of Aircraft Rental (if any)	1.970	
7.	Loss of Flight Training (if any)	2.121	



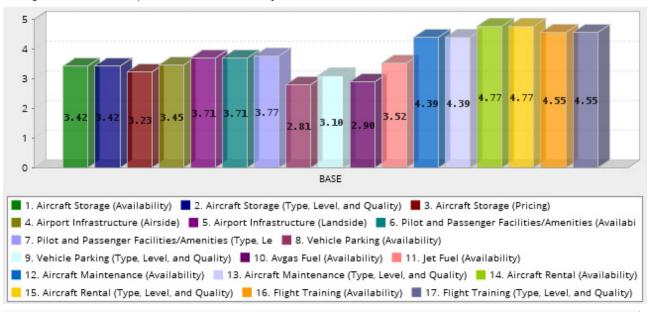
Q. Airport Management and Operations: Please provide your rating in each of the following areas for the airport selected. **32** *responses*



	Question	Score	
1.	Communications with Airport Management/Staff	3.312	
2.	Responsiveness of Airport Management/Staff	3.562	
3.	Attitude of Airport Management/Staff	3.531	
4.	Airport Safety	2.812	
5.	Airport Security	3.344	
6.	Airport Maintenance	3.812	
7.	Perceived Support for Airport (State)	3.719	
8.	Perceived Support for Airport (Airport Owner/Operator)	3.625	
9.	Perceived Support for Airport (Community)	3.438	



Q. Airport Infrastructure, Facilities, and Services: Please provide your rating of the following categories for the airport selected. 31 responses



	Question	Score	
1.	Aircraft Storage (Availability)	3.419	
2.	Aircraft Storage (Type, Level, and Quality)	3.419	
3.	Aircraft Storage (Pricing)	3.226	
4.	Airport Infrastructure (Airside)	3.452	
5.	Airport Infrastructure (Landside)	3.710	
6.	Pilot and Passenger Facilities/Amenities (Availability)	3.710	
7.	Pilot and Passenger Facilities/Amenities (Type, Level, and Quality)	3.774	
8.	Vehicle Parking (Availability)	2.806	
9.	Vehicle Parking (Type, Level, and Quality)	3.097	
10.	Avgas Fuel (Availability)	2.903	
11.	Jet Fuel (Availability)	3.516	
12.	Aircraft Maintenance (Availability)	4.387	
13.	Aircraft Maintenance (Type, Level, and Quality)	4.387	
14.	Aircraft Rental (Availability)	4.774	
15.	Aircraft Rental (Type, Level, and Quality)	4.774	
16.	Flight Training (Availability)	4.548	
17.	Flight Training (Type, Level, and Quality)	4.548	

Client: Siskiyou County Local Transportation Commission **DRAFT 04/16/2020** Consultant Team: Aviation Management Consulting Group and Mead & Hunt



A. INTRODUCTION

Performance criteria were developed to allow each Airport's contribution to Siskiyou County's aviation system to be objectively defined.

B. ACTIVITY

For the Airports to effectively serve their based and transient aircraft users, each individual airport should have adequate operational capacity. There are several activity performance measures to determine demand levels against this operational capacity.

- ➤ Aircraft Operations: Based on the aircraft operations information for each Airport provided in Section: Influencing Factors, it does not appear that there is currently an issue for any of the Airports having adequate operational capacity related to airfield use. However, since the Airports currently have no adequate mechanism to count or track aircraft operations, utilizing aircraft operations as a clear measure of demand is problematic. The airport sponsors may want to consider existing technology that can be utilized to track aircraft operations.
- ➤ Based Aircraft: Based on the based aircraft information for each Airport provided in Section: Influencing Factors, it does not appear that there is currently an issue for any of the Airports having adequate operational capacity related to aircraft storage. However, there does appear to be some limitations to the ability of certain airports accommodating future based aircraft either due to lack of unused aircraft storage facilities, lack of infrastructure to develop additional aircraft storage facilities, or specific mechanisms to track interest in additional aircraft storage facilities.
- ➤ Fuel Volumes: For those airports that have aviation fuels available (Siskiyou County, Scott Valley, Weed, and Montague), it does not appear that there is currently an issue for these airports having adequate operational capacity related to aircraft refueling. However, airports without the availability of aviation fuels severely hampers meeting the demand for existing based and transient users as well as increasing the demand for use of the airports.

C. ECONOMIC SUPPORT

There is no question that general aviation airports are, or can be, economic engines for local communities. This includes direct, on-airport economic impact and indirect, off-airport economic impacts. This economic benefit begins with an airport having certain level of services at the airport.

At a minimum, this begins with the availability of fuel and ground transportation. When airport users, especially transient users, have access to fuel and ground transportation services, the role that airports play in supporting the economy is increased.

It is important to note that an airport is typically not the final destination for transient aircraft users. In most situations, the transient aircraft user has a final destination in near proximity to the airport. In the industry, we call this "the last mile." If airport sponsors and FBOs do not have an ability to facilitate ground transportation for transient aircraft users to go "the last mile" then it is highly likely that the airports ability to attract transient aircraft users is limited.

The best way for an airport sponsor to measure an airport's economic impact is to conduct an economic impact study. This study measures the economic factors including the total number of jobs and associated wages on the airport and the economic activity generated in the surrounding community.



D. PUBLIC SERVICE

Airport access for public service activities are essential to realize the full value of a general aviation airport, especially for rural communities. The tracking of the type and number of these public service flights is an excellent measurement of the value of each of the public-use, general aviation airports included in the RAP. These type of public service flights are as follows:

- Aeromedical flights
- Law enforcement flights
- Disaster relief flights
- Search and rescue flights
- Firefighting and suppression flights
- > Transient military flights

E. EFFICIENCY

1. Airside Infrastructure and Facilities

An airport's airside infrastructure and facilities define which types of aircraft can utilize the airfield and its relative attractiveness as a place to base one's aircraft. The key facilities are:

- Runway length
- Pavement strength
- Runway edge lighting system and rotating beacon
- Landing aids
- Aircraft parking apron
- Storage hangars
- Aviation fuels: 100-octane low lead (100LL) and Jet A

The performance criteria will be based on whether the facility is currently available or has been planned to be added.

2. Nonstandard Conditions

Nonstandard conditions include airfield features that do not meet current FAA design standards. It also includes obstructions to the airspace needed for safe operation of the airport. Nonstandard conditions were identified from examinations of the airport layout plan for each airport and review of the annual safety inspection letters prepared by the Caltrans Division.

The performance criteria will be based on whether nonstandard conditions exist. If they exist, criteria will depend on whether the airport sponsor currently has a plan in place to eliminate or mitigate them.

3. Instrument Approach Procedures

For the Airports to effectively support the local economies, each airport must be accessible. For airports to be accessible from the air, the primary airports within the system should have a precision approach or an approach with vertical guidance and other airports could have a non-precision approach.

Instrument approach procedures developed by the FAA allow properly trained pilots with appropriately equipped aircraft to land at an airport through cloud cover and when forward visibility is below specified minimums. Even when whether conditions to not require the use of instrument approach procedures, use of these procedures improve safety during landings at night.



The availability of an instrument approach procedure increases the value of an airport as a source of transportation. It is particularly important in serving flights related to business. Qualitatively, instrument approach procedures with lower ceiling and forward visibility minimums are usually of greater utility than those with higher minimums.

With evolving satellite technology, options for airports to have a published approach are more diverse. However, there are other requirements that airports must also meet before an approach can be approved; it is these additional requirements that occasionally prohibit an airport from having a published approach.

4. Landside Facilities

Landside facilities support pilots and passengers before and after flights. At a minimum, this would consist of some form of restroom. Ideally this would include a full-service fixed base operation that offers maintenance, flight training, fuel, and charter flights.

- Fixed base operation
- Specialized aviation service operation
- Pilots lounge
- Restrooms

The performance criteria is if any of these facilities are available or whether provision is made for them.

5. Road Access and Parking

Vehicle access is needed to connect pilots and passengers (and potentially cargo) to the surface transportation system. The point of access should be clearly defined by signage. Parking should be adjacent to the transient parking apron. Additional parking near based aircraft hangars may also be useful, depending upon the airport's layout and size.

The performance criteria is based on whether the airport has adequate, convenient parking for both transient and based aircraft. If adequate, convenient parking is not currently provided, do plans exist to provide it?

6. Non-Aeronautical Development

Only the largest general aviation airports generate sufficient revenues from aeronautical uses to fund both operational and capital needs. Therefore, most general aviation airports need revenues from on-airport non-aeronautical uses to be self-sufficient.

The performance criteria is based on whether the airport has existing non-aeronautical uses or the capacity to accommodate them.

7. System Coverage

Ideally, Siskiyou County would possess a system of airports spread throughout the County in order to provide convenient access to the air transportation system for all its residents. FAA Order 5090.5, Formulation of the NPIAS and the ACIP, uses the criteria for entry of an airport into the NPIAS of 30 miles radius from the nearest NPIAS airport. That is, the FAA considers 30 miles as the convenient driving distance to a Basic airport. A Basic airport is an airport principally used for personal flying, using propeller-driven aircraft, which typically has minimal infrastructure.

The performance criteria is whether an airport is at least 30 road miles from another airport. For this system plan, it is not required that the airport meet the requirements to be listed in the NPIAS.



A. INTRODUCTION

This Alternative Analysis section presents the Siskiyou County airport system-level alternatives for consideration by each of the Airport's airport sponsors. The analysis begins with an overview of the common challenge of generating sufficient operating revenues to operate and maintain a rural general aviation airport. Possible means of increasing airport revenues are described in this section and concludes with a review of possible County airport system-level alternatives.

B. FINANCIAL CHALLENGE

General aviation airports with small numbers of based aircraft and nominal use by transient aircraft typically do not generate sufficient funds to provide for the airport's operational and capital financial needs. The exceptions to this "rule" are usually those airports that are able to lease land and improvements not required for aeronautical activities to entities engaged in non-aeronautical activities. Sometimes a specialized use, such as a fire attack base, will generate revenues from land leases, landing fees, and fuel flowage fees to contribute towards an airport's goal of being financially self-sufficient.

Table 25 presents the estimated capital expenditures necessary to maintain the pavements at each of the seven airports over the next 20 years. These costs assume that pavement maintenance will occur at standard intervals. These estimates should be considered order-of-magnitude costs. Some estimates are based upon very limited data on pavement condition and historical maintenance activities. Costs for maintenance of lights, electrical systems, and other utilities are not included due to lack of data.

Table 25: 20-Year Capital Requirements

Airport	20-Year Costs	Local Share	
Butte Valley*	\$6,830,000	\$683,000	
Dunsmuir	\$8,180,000	\$818,000	
Happy Camp	\$7,210,000	\$721,000	
Montague*	\$10,810,000	\$1,081,000	
Scott Valley*	\$10,060,000	\$1,006,000	
Siskiyou County	\$52,250,000	\$5,225,000	
Weed	\$18,070,000	\$1,807,000	

^{*} Not eligible to receive FAA grants, but is eligible for State grants.

The costs for these paving projects are eligible for grant funding from the FAA and/or State of California; however, State grant funding is much more limited than FAA AIP grants.

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C. INCREASING REVENUES

It is desirable for airports to be as financially self-sustaining as possible. Where this is not possible, municipalities (e.g., cities and counties) that own and operate airports must utilize general fund revenues to operate and maintain the airport. General fund revenues are finite, and many competing programs seek access to these funds. This Section discusses strategies for increasing the revenues generated by airports. Sources of capital funds are presented in the following section, Funding Sources.

With limited exceptions (discussed below) growth in an airport's activity levels is generated by economic activity in the communities they serve. Airports serving communities that are not growing economically are less likely to experience growth than those serving communities with growing economies. Caltrans' California County-Level Economic Forecast 2017-2050 forecasts little economic growth for Siskiyou County. If this forecast proves to be correct, economic activity in the communities served by the airports in Siskiyou County will have limited ability to foster growth in airport activity and associated revenue generation. Six possible strategies for increasing airport-generated revenue are presented as follows.

1. Increase Aviation Activity

Four of the airports in Siskiyou County have self-fueling facilities. Increasing aircraft operations could be expected to increase aviation fuel sales and related airport revenues. Given the expectation of limited broad economic growth, the potential generators of this growth are external to the County. Four potential generators of increased aircraft operations are:

- Increase landside and airside attractiveness of airport
- > Add or expand aviation events that engage airport and local community
- Attract new commercial aeronautical activities
- Add specialized aviation uses
- Add business in community that would utilize the airport

2. Increase Attractiveness

Minor improvements requiring relatively low investment may increase the attractiveness of an airport by transient pilots. An example mentioned during the project's initial outreach meeting was an airport car. An airport car is a vehicle made available at no cost to visiting pilots. The only requirement is for the vehicle to be refueled after use. Sometimes prior arrangement is needed to obtain access to the vehicle.

3. Aviation Events

Siskiyou County Airport hosts sailplane events annually; the tow planes associated with these events boost aviation fuel sales. Events like this benefit the tourist economy through associated lodging and meals. This type of event could be expanded at Siskiyou County Airport. Similar events could be held at the other three airport that have self-fueling. Events could be general fly-ins or aircraft model-specific fly-ins. These events are typically sponsored by a local pilots' group or local service organization. An associated breakfast is sometimes arranged as a fund-raiser for local causes.

Airport owners can generate new or expanded events two ways. First, they can host the events themselves. Alternately, they can encourage these events by maintaining reasonable requirements for insurance and other cost-related factors. Advertising the availability of their facilities for events would encourage these events.



4. Aviation Business

Some aviation businesses (known as fixed base operators or FBOs) have loyal clientele who fly long distances because of the perceived quality of service. Attracting one of these businesses to an airport would increase revenues by boosting fuel sales and adding lease revenues. Periodically advertising the availability of leaseholds or facilities would support the potential for adding an FBO.

5. Specialized Use

Attracting an aviation-related specialized use would increase use of the airfield, with associated increases in fuel sales, and add leasehold revenue. Examples include public service uses such as the fire attack bases operated by Cal Fire and the U.S. Forest Service. Other uses would be those tied to aviation research activities. Drone-related research is a current example. Siskiyou County Airport is the most likely venue for these uses due to its runway length and land available for leaseholds. However, these uses are likely to need sewer, water, and other utilities to support them. Directly promoting the availability of facilities to potential clients would be the most direct way of attracting one of these uses.

6. Aviation-connected Business

A segment of businesses directly utilizes aviation for transport of staff or their products; economic development activities should include targeting this class of businesses, and including proximity to airports in promotional materials would also be appropriate. Due to their runway length, Siskiyou County Airport and Weed can accommodate the widest range of aircraft; however, any airport with available land and full utilities is potentially attractive as a site for this class of business.

D. SYSTEM LEVEL ALTERNATIVES

1. Maintain Airports in Current Roles

Under this alternative, the seven Airports would retain their current roles. Maintaining the Airports in their current roles does not necessarily mean that no growth or improvements would occur; rather, this means that any changes at an airport would be consistent with its current roles. Change would be incremental and follow the current pattern. Choosing this alternative implies acceptance of the ongoing operational costs and the anticipated capital costs noted above.

2. Maintain Airports Essential to Core Services

All seven Airports in Siskiyou County provide utility to the aviation system. Even if an airport offers no services and consists of only a runway and parking apron, it provides a connection to the air transportation system. It is equivalent to a road in that it links one location to the rest of the world. However, if financial constraints make it infeasible to maintain all Airports in the system, guidance is needed to determine which Airports will/should be maintained by the local agency that owns and operates them. This section provides this guidance.

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Even if an airport is no longer maintained by the county or municipalities that currently own and/or operate them, it does not necessarily mean that the airport will close. Options for continuing operation of the Airports by other means is discussed later in this section. Essential services are as follows:

- Medical transport is an essential service; it is critical to the maintenance of the health and welfare of the citizens of Siskiyou County and its visitors. There are two elements to medical transport: emergency response and inter-hospital transfers. Helicopters are used for responding to emergency transport needs. Helicopters do not require airports for this. Medical transport company staff indicated that they use airports only if they are conveniently close to accident sites. It is more common for helicopters to use roads or other improvised landing areas to reach their patients. They commonly land at the hospital that will receive the patient. Airports are only needed for medical transport from a local hospital (Fairchild Medical Center or Mercy Medical Center) to hospitals in other areas. All of these flights are made using fixed-wing aircraft. Only Siskiyou County Airport has been used for these flights; therefore, only maintenance of Siskiyou County Airport is required to provide medical transport as an essential service.
- Suppression of wildfires is an essential service; aircraft play a role in fire suppression operations by Cal Fire and the U.S. Forest Service. Currently, three air-attack facilities exist in Siskiyou County: an air tanker base at Siskiyou County Airport and helitack bases at Scott Valley and Happy Camp. All airports may be used as temporary staging areas for fire suppression activities. Typically, these temporary operations use helicopters; only the operations at Siskiyou County Airport routinely use fixed-wing aircraft. Happy Camp and Scott Valley are operated by Siskiyou County under a lease from the U.S. Forest Service. Even if Siskiyou County no longer operated the airports, the Forest Service would be free to continue to operate the helitack bases whether or not the associated runways remained active. Therefore, only maintenance of Siskiyou County Airport is required to provide aerial fire suppression as an essential service.
- Provision of aircraft maintenance services is an essential service; general aviation aircraft require an airworthiness inspection at least once each year. This inspection, as well as maintenance and repair services, are usually provided by an FBO or SASO. Currently only Weed and Montague have an FBO. These services serve both based and transient aircraft. Although maintenance services are essential, it is not essential that more than one airport in Siskiyou County have these services. However, given the financial tenuousness of FBOs at small airports, redundancy within the Siskiyou system is critical. Therefore, it is considered essential that both Weed and Montague be maintained. However, should either airport lose their FBO and not replace it within five years, the airport would no longer be considered essential based on this criterion.
- ▶ Provision of aviation fuels is an essential service. Piston-powered aircraft use 100 octane low lead fuel (100LL), and turbine-powered aircraft (jets, turboprops and most helicopters) use Jet A fuel. Currently 100LL is available at Siskiyou County Airport (as of February 2020, temporarily unavailable), Montague and Weed, and Scott Valley. Jet A is only available at Siskiyou County Airport and Weed. Although desirable, it is not essential to have fuel service at every airport. What is essential is that the fuel is available 24 hours per day and that both 100LL and Jet A are available. To provide redundancy, it is considered essential that both Siskiyou County Airport and Weed be maintained to provide this service.

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- ➤ A lighted runway is an essential facility. This makes airports potentially available 24 hours per day, although weather conditions can reduce this availability. Currently, three airports have runway edge lights: Siskiyou County, Montague, and Weed. Geographic diversity is important to provide access to various areas within Siskiyou County. Siskiyou County and Montague are in the northern half of the County and Weed is in the southern half. One in each region is essential. Airports with longer runways can accommodate a greater range of aircraft, and Siskiyou County has a longer runway than Montague. Therefore, maintaining it to serve the northern region is considered essential. Weed is essential to serve the southern region.
- Aircraft storage hangars are essential facilities; they protect aircraft from sun damage to paint, interiors, and instruments. They also provide greater security. Hangars are desirable facilities at all airports, and all the airports in Siskiyou County have at least one hangar. The hangar at Butte Valley is not occupied. Although hangars are essential facilities, by themselves they are not a reason to classify an airport as essential to the system of airports in Siskiyou County.

Table 26: Essential Services and Facilities Comparison

	Medical	Wildfire	Aircraft	Aviation F	uels	Lighted	Aircraft
Airport	Transport	Suppression	Maintenance	100LL	Jet A	Runway	Storage
Butte Valley*							Х
Dunsmuir							Χ
Happy Camp		Χ					Χ
Montaque*			X	X		Χ	Χ
Scott Valley*		X		X		Χ	Χ
Siskiyou County	Χ	X		X?		Χ	Χ
Weed			X	X	Х	Χ	Χ

Airports Essential to Core Services: Based upon the preceding analysis, it is concluded that three airports are essential to providing core services to the system of airports in Siskiyou County:

- Montague-Yreka
- Siskiyou County
- Weed

It is important that the agencies that own these airports maintain these airports so that they may continue to support aviation activities in Siskiyou County.

Airports with Community Benefits: Four airports were identified as not being essential to providing the core services for the system of airports in Siskiyou County:

- Scott Valley
- Butte Valley
- Dunsmuir
- Happy Camp



This does not mean that they have no value to the communities they serve; rather, it means that their continued operation is less critical to the County's system than the four airports identified as essential. If the local agencies who operate these airports cannot provide the financial resources to maintain these airports, there are three possible alternative means of keeping them in operation:

- Sell the airport to private parties.
- Form an airport district.
- > Return the airport to the USFS to operate (applicable to Happy Camp and Scott Valley).

Selling the airport to private parties would shift the obligation for its maintenance and operation from the local public agency. The private parties could be the users (based aircraft owners and/or frequent transient users) or a third party.

Creating an airport district would retain public ownership while shifting the cost to a special-purpose agency. This district would be formed under the provisions of PUC, Division 9 – Aviation, Part 2 – Airport Districts (§22001 et seq.) Given the limited income-producing capability of the four airports, it is anticipated that the district would need to have taxing authority. The tax levee would be designed to provide funds for the period maintenance needed to keep the facility operational. Creating the district and authorization of the tax levee would require an affirmative vote of those within the proposed district boundaries.

Returning the airport to USFS operation is possible at Happy Camp. Both airports are operated by Siskiyou County under a lease from that federal agency. Although the fire suppression operations conducted by the Forest Service are principally helicopter-based, the agency may wish to retain the option of operating fixed-wing aircraft from those airports. This would need to be negotiated as part of the lease abandonment.

3. Expand Role of Selected Airports

Each airport was evaluated for the potential to have its role expanded into new roles. These roles could involve either aeronautical or a compatible nonaviation uses. While it is possible that each of the airports might attract a new use that would expand its role, certain characteristics are judged to be necessary to make an expansion in role plausible. The most basic requirement is that an airport must have land available for new leaseholds. It must be possible to access available land without entering the airfield operations area (i.e., aprons, taxiways or runways). Basic utilities, such as water, sewage treatment, and electricity) must be available. To be considered a candidate for an expanded aeronautical use, an airport must be able to accommodate a wide variety of aircraft. This would mean a runway with a length of at least 5,000 feet. Having pavement strength to accommodate large aircraft (i.e., over 12,500 pounds) would also be needed to support an expanded aeronautical use. However, unlike runway length, it is considered reasonable to assume that an airport could increase it pavement strength. To be considered a candidate for nonaeronautical uses, an airport needs to be within 20 minutes driving time of Interstate 5. There also must be a community within 20 minutes driving time to provide needed employees.

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ALTERNATIVE ANALYSIS SISKIYOU COUNTY REGIONAL AVIATION PLAN

Currently none of the seven airports fully meets these criterial for the reasons summarized below. The airport with the most promise is Siskiyou County. However, providing a sewage treatment system has been a long-standing need for the airport. It has not been resolved due to the high cost and technical difficulty of providing a treatment system.

- ➤ Butte Valley limited land, lacks sewer and water, distant from interstate, lacks nearby employment base, runway length limits size of aircraft that could use the airport.
- > Dunsmuir limited land, runway length limits size of aircraft that could use airport.
- ➤ Happy Camp limited land, distant from interstate, runway length limits size of aircraft that could use the airport.
- ➤ Montague available land has poor street access, runway length limits size of aircraft that could use the airport.
- > Scott Valley distant from interstate, runway length limits size of aircraft that could use the airport.
- Siskiyou County lacks sewer treatment capacity.
- Weed limited land.



A. INTRODUCTION

Separate and apart from federally-obligated, public-use airports having the obligation, by and through the FAA Airport Sponsor Assurances, to "maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing," the financial and operational survival of general aviation airports are dependent on the identification and utilization of multiple revenue and capital funding sources to develop, operate, and maintain the airport.

This section will identify and review some common funding sources that may be available to the public-use, general aviation airports located in the County and included in the RAP, including aeronautical revenue funding sources, non-aeronautical revenue funding sources, and capital funding sources.

B. AERONAUTICAL REVENUE FUNDING SOURCES

1. Aeronautical Land and Improvement Rents

In addition to the primary function of operating and managing the airfield infrastructure of the airport (e.g., runways, taxiways, and associated aprons), most airport sponsors can be, and should be, considered a real estate management company. The single greatest asset that an airport sponsor has to generate revenues is the land surrounding the airfield. The highest and best use of this land is aeronautical activities. Therefore, the single greatest revenue funding sources for an airport are typically the (1) leasing of airport land and/or improvements for aeronautical use. In **Figure 4**, some examples of aeronautical land and improvement uses are identified.

Figure 4: Aeronautical Land and Improvement Uses

Aircraft Storage **SASO Improvements FAA Improvements FBO Improvements** Improvements and and Facilities and Facilities and Facilities **Facilities** Control tower General aviation Aircraft maintenance Ramp (including) terminal building tiedown spaces) and repair Approach equipment Offices Avionics and Shadeports Navigation instruments equipment •T-hangars Shops Aircraft rental Storage Executive/box Flight training hangars Aircraft hangars Aircraft charter Community hangars Ramp Aircraft management Corporate hangars Vehicle parking areas Specialized services Maintenance hangars • Fuel storage

Following are descriptions of the available models for airport sponsors to generate revenue funding sources from the "leasing" of airport land.

Traditional Lessor Model: Real estate development at airports typically follow the traditional model whereby the airport sponsor enters into a land lease for a set term and for a market land rent. Although this approach offers the airport a steady and predictable income stream, any opportunity to share in the more lucrative sublessee rent is left exclusively for the developer. When an airport sponsor is taking no risk in a development project, the traditional lessor/lessee model approach is appropriate.



- ➤ Equity Participation Model: In situations where private enterprise may not be in a position to make an investment or the opportunity does not return a sufficient return on investment for the private enterprise, the airport sponsor could swap a portion of the land rent in exchange for a share of future revenue streams. In addition, when entrepreneurial airport sponsors are willing to assume some development risk, they can have the opportunity to enhance cash flow from development projects by contributing the land in return for retaining an equity stake in the developed property. Contributing an asset (such as land) in exchange for equity is referred to as equity participation.
- Direct Ownership Model: Depending on the airport sponsor's circumstances, the direct ownership model is a valid option for consideration. However, direct ownership increases the airport sponsor's risk. Focusing on the development of land for commercial real estate provides a good illustration of the factors that must be taken with the direct ownership option. Direct ownership involves the airport sponsor assuming the role of developer and, therefore, the obligations and risks inherent in that role. The airport sponsor owns the entire project and receives all the profits. Should the project fail to meet projections, the airport sponsor assumes the losses of the failed project, as opposed to being a traditional lessor. Given that most airports are not tax paying enterprises, such losses do not provide a tax incentive to them, as they might to a tax paying private party. The second significant risk is the financing. Should the project fail to generate sufficient cash flow to amortize debt, the airport sponsor is responsible for all shortfalls. The reward for assumption of all these risks is the receipt of 100% of the profits of successful developments. Accordingly, solid financial forecasts are crucial to any analysis of the viability of a project to determine whether such profits are likely to be sufficient to make the risk worthwhile.

2. Aeronautical Fees

Based on AMCG's industry experience and supported by the information contained in the firm's proprietary industry database (which is utilized to track, monitor, and analyze general aviation aeronautical fee data and trends), AMCG has identified current industry practices related to general aviation aeronautical fees. It is important to note that, in AMCG's opinion, certain industry practices are not necessarily representative of best practices¹². Within this context, a summary of these findings which, in AMCG's opinion, are representative of current industry practices for establishing general aviation aeronautical fees follows:

➤ Fuel Flowage Fees: Fuel flowage fees are currently the most common general aviation fee implemented by airport sponsors to recover the costs associated with operating and maintaining the airport for use by aeronautical users. Fuel flowage fees are typically collected directly by the airport sponsor on a monthly basis. When a fuel flowage fee is charged by an airport sponsor, fueling entities (including both commercial and non-commercial entities) are typically required through a lease agreement or permit to collect and/or pay a fuel flowage fee for each gallon of fuel sold or dispensed at the airport. Fuel flowage fees are typically paid on a "cents per gallon" basis and typically range from \$0.05 to \$0.40 per gallon.

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For the purposes of this document, best practices are defined as the most effective and practical methods or techniques for achieving an objective while making the optimal use of the airport's assets and resources.



- Through Put Fees: While throughput fees have not always been charged by airport sponsors to recover the costs associated with using an airport sponsor owned fuel storage facility by commercial and non-commercial aeronautical users, this fee is becoming more common to ensure equitable treatment of similarly situated operators. This fee is designed to recover the investment, capital costs, and operating costs related to an operator utilizing an airport sponsor owned fuel storage facility. Throughput fees are typically paid on a "cents per gallon" basis for each gallon of fuel sold or dispensed by a commercial or non-commercial operator utilizing the airport sponsor owned fuel storage facility. Throughput fees are typically collected directly by the airport sponsor on a monthly basis.
- > Transient Aircraft Fees: Historically, transient aircraft fees have not been charged by airport sponsors to general aviation aircraft operators. However, airports are beginning to consider transient aircraft fees as a method to augment the loss of fuel flowage fees in the event a transient aircraft operator does not purchase fuel or fuel is not sold at the airport. When charged, transient aircraft fees are typically based on an average uplift mechanism (airport specific or industry standard) and the existing fuel flowage fee at the airport. Typically, transient aircraft fees are charged in accordance with an established schedule (i.e., aircraft within designated size ranges pay the same fee) and a minimum fee may be specified. In some cases, piston aircraft can be exempt from transient aircraft fees. Transient aircraft fees may be collected directly by the airport sponsor or the airport sponsor may have an agreement with a commercial operator to collect and remit transient aircraft fees. The agreement may allow the commercial operator to retain a portion of the transient aircraft fees collected as compensation for services rendered by the commercial operator. The amount retained is often referred to as an administrative fee.
- ➤ Landing Fees: Historically, landing fees have not been charged by airport sponsors to general aviation aircraft operators. Due to advancements in technology, more airports are beginning to charge landing fees as an alternative to, or in addition to, fuel flowage fees. Additionally, airport sponsors may charge a landing fee for certain activities occurring at the airport. When charged, landing fees are most commonly based on aircraft weight and a "cents per 1,000 pounds" approach using historic costs and the annual gross landed weight for all aircraft using the airport. In the alternative, landing fees can be charged in accordance with an established schedule (i.e., aircraft within designated weight ranges pay the same fee) and a minimum fee may be specified. In some cases, based aircraft and/or aircraft under a specified weight (e.g., 5,000 pounds MGLW) can be exempt from landing fees. Landing fees may be collected directly by the airport sponsor or the airport sponsor may have an agreement with a commercial operator to collect and remit landing fees. The agreement may allow the commercial operator to retain a portion of the landing fees collected as compensation for services rendered by the commercial operator. The amount retained is often referred to as an administrative fee.
- Transient Parking Fees: Transient parking fees are common throughout the industry and typically charged for the use of airport sponsor owned ramp areas for aircraft parking. Fees may be charged for day use (which is sometimes referred to as a ramp fee), overnight, and/or monthly use (which is commonly referred to as tiedown fee and charged to based aircraft). While more commercial operators (e.g., Fixed Base Operators FBOs) charge ramp fees for general aviation aircraft parking on a commercial operator's leased premises, this type of fee

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is not as common for airport sponsors, except when a commercial operator is operating and/or managing a ramp area on behalf of the airport sponsor. Typically, transient parking fees are charged in accordance with an established schedule (i.e., aircraft within designated weight and/or size ranges pay the same fee) and a minimum fee may be specified. In the alternative, transient parking fees may be charged on a "cents per 1,000 pounds" approach and a minimum fee may be specified. Transient parking fees may by collected directly by the airport sponsor or the airport sponsor may have an agreement with a commercial operator to collect and remit transient parking fees. The agreement may allow the commercial operator to retain a portion of the transient parking fee collected as compensation for services rendered by the commercial operator. The amount retained is often referred to as an administrative fee.

- > Based Aircraft Fee: Historically, based aircraft fees have not been charged by airport sponsors to general aviation based aircraft. However, more airports are beginning to consider based aircraft fees as an alternative to fuel flowage fees or to augment landing fees if based aircraft are exempt from the landing fee. When charged, based aircraft fees are most commonly based on aircraft weight and a "cents per 1,000 pounds" approach (similar to landing fees). In the alternative, based aircraft fees can be charged in accordance with an established schedule (i.e., aircraft within designated weight and/or size ranges pay the same fee). Based aircraft fees may be collected directly by the airport sponsor or the airport sponsor may have an agreement with a commercial operator to collect and remit based aircraft fees. The agreement may allow the commercial operator to retain a portion of the based aircraft fees collected as compensation for services rendered by the commercial operator. The amount retained is often referred to as an administrative fee.
- Percentage of Gross Receipts: Over the years, a percentage of gross receipts fee has become less common. In those instances where a percentage of gross receipts is charged, revenue related to fuel sales to based and transient users are typically exempt from inclusion, especially when fuel flowage fees are charged by the airport sponsor. In addition, other general aviation sales (e.g., aircraft sales, parts, and accessories) may also be exempt due to the product (as opposed to service) nature and the high dollar amounts typically involved. According to the Airport Development Acceleration Act (Anti-Head Tax Act) of 1973, a percentage of gross receipts cannot be charged for aircraft charter activities since such activities are subject to a ticket or segment tax. The amount of the fee and any exceptions or exemptions is typically stipulated in the lease agreement between the airport sponsor and the commercial operator. Percentage of gross receipts fees are typically collected directly by the airport sponsor on a monthly or annual basis.
- Commercial Aeronautical Permit Fees: Commercial aeronautical permit fees are becoming more common to recover the administrative time and costs of the airport sponsor pertaining to inspection and audit of commercial operators. When charged, commercial aeronautical permit fees are typically charged on a monthly or annual basis depending on the type of aeronautical activity being conducted. Commercial aeronautical permit fees are typically based on a flat amount that must be paid to obtain a permit to operate a commercial business at the airport. The operating permit typically expires on an annual basis, thus requiring commercial aeronautical permit fees to be paid annually for renewal. Commercial aeronautical permit fees are typically collected directly by the airport sponsor on a monthly or annual basis.

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C. NON-AERONAUTICAL REVENUE FUNDING SOURCES

1. Non-Aeronautical Land and Improvement Rents

While most airport land has certain restrictions related to non-aeronautical use, the FAA recognizes that in order for certain airports to fulfill their obligation of making the airport as self-sustaining as possible under the circumstances existing that it is sometimes necessary for the FAA to release the airport sponsor of these restrictions when certain lands and improvements are not needed in the near term for aeronautical use.

Therefore, another excellent revenue funding source for airports can be the (1) leasing of airport land for the development of lessee owned improvements for non-aeronautical use and (2) leasing of land and improvements and facilities owned by the airport sponsor for non-aeronautical use by lessees. It is important to remember that, generally, the FAA must approve any non-aeronautical use of airport land and improvements designated for aeronautical use purposes. In Figure 5, some examples of non-aeronautical land and improvement uses are identified.

Figure 5: Non-Aeronautical Land and Improvement Uses

Recreational Commercial Office and Storage Other Campground Convenience store Educational Advertising Entertainment center Hotel or motel institution billboards Industrial park Agriculture and •Golf course Rental car facility forestry Office building Hunting and fishing Restaurant Cellular telephone Storage units Hiking and biking Shopping (retail) towers Technology park center •Skate park •Oil, gas, or mineral Automobile Warehouse •Race (go-cart) track exploration, dealership Vehicle Parking Gaming production, or Gasoline station •RV and boat storage extraction •Car wash Public safety or emergency services

2. Non-Aeronautical Fees

Based on AMCG's industry experience and supported by the information contained in the firm's proprietary industry database (which is utilized to track, monitor, and analyze general aviation nonaeronautical fee data and trends), AMCG has identified current industry practices related to general aviation non-aeronautical fees. It is important to note that, in AMCG's opinion, certain industry practices are not necessarily representative of best practices. Within this context, a summary of these findings which, in AMCG's opinion, are representative of current industry practices for establishing general aviation non-aeronautical fees follows:

> Access Fees: Historically, access fees have not been charged by airport sponsors to general aviation users. However, more airports are implementing security measures and beginning to charge access fees. Typically, access fees are charged in accordance with an established schedule on a monthly or annual basis. Depending on the approach and infrastructure, the access fee may be charged for individual access (for an airport badge, gate card, keys, or other instrument) or for vehicle access (vehicle permit or another

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instrument). Access fees are typically collected directly by the airport sponsor upon issuance of the badge, gate card, keys, permit, and/or other instrument. Additionally, access fees are typically collected on an annual basis.

➤ Non-Aeronautical Activity Fees: Historically, non-aeronautical activity fees have not been charged by airport sponsors. However, consistent with FAA requirements, more airports are implementing a non-aeronautical activity fee program to charge for the non-aeronautical use of airport property. Typically, non-aeronautical activity fees (e.g., special events fees, commercial filming fees, use fees, etc.) are charged on a case-by-case basis depending on the length of time, impact to airport operations, necessity of additional staffing, and number of people accessing the airport. Non-aeronautical activity fees are typically collected directly by the airport sponsor upon issuance of a permit for the non-aeronautical use of airport property.

D. CAPITAL FUNDING SOURCES

Obtaining sufficient capital funds to maintain and improve the Airports is the central challenge for the Siskiyou County system of airports. This section identifies aeronautical and non-aeronautical sources of capital funds. Generally, only the aeronautical oriented grant programs will fund airfield maintenance projects. However, a number of capital funding sources are available to subsidize new improvements.

1. Federal Aviation Administration

For most public airports, the Airports Improvement Program (AIP), administered by the FAA, is the principal source of capital funds for airport development projects. Airports must be listed in the NPIAS to be eligible to receive AIP grants. Airports with no based aircraft or that are located within 20 minutes driving time of a larger airport typically do not qualify for being in NPIAS. This is the reason Montague, Butte Valley, and Happy Camp are not in the NPIAS.



Most capital projects at general aviation airports are eligible for AIP funding. Common projects are as follows:

- maintenance of existing or construction of new runways, taxiways, taxilanes, electrical systems, and drainage systems;
- > construction of security or wildlife exclusion fencing:
- construction of navigation or landing aids such as: rotating beacons, Automated Weather Observing Systems (AWOS), Precision Approach Path Indicators (PAPI), and runway edge lights;
- preparation of airport master plans and airport layout plan updates; and
- preparation of federal environmental documents associated with grant-eligible projects.

Airports must submit a five-year airport capital improvement program (ACIP) to the FAA annually. This submittal is used to define both the projects and the funding being sought, along with the requested grant amounts. Annual discussions between the airport and FAA staff are used to align airport requests with FAA priorities.

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AIP grant funds are distributed in two ways, as described below. In California, FAA grants require a 10% match. This is commonly met by a combination of local funds and a grant from the California AIP Matching Grant program (discussed below).

- ➤ Entitlement Funds: General aviation airports in NPIAS are annually allocated \$150,000 in FAA grant funds. These funds can be aggregated for four years before they expire. It is possible to transfer these funds between airports operated by the same agency or to transfer them to another agency that operates a NPIAS airport.
- Discretionary Funds: For projects that require funds beyond those available from the entitlement program, airports can compete for discretionary funds. NPIAS airports in Siskiyou County will be competing with grant requests from airports in northern California administered by the FAA's San Francisco Airports District Office. For large grant requests, there is normally a three-year lead time to get the grant programmed.

2. California Division of Aeronautics

The California Division of Aeronautics administers four programs that can be used for capital funding. The funds are allocated by the California Transportation Commission from revenues received from State aviation fuel taxes.



- Annual Credit Grant: Publicly-owned, public-use General Aviation airports in California, other than those designated as a reliever airport, are annually allocated a \$10,000 Annual Credit Grant. This grant may be used for eligible capital improvements and/or towards the operation of the airport. These funds can be used for a much wider range of aviation-related expenses than FAA grants or other State grants. This grant program is structured as a reimbursement program (e.g., no match is required).
- ➢ AIP Matching Grant: Public-use General Aviation and Reliever airports in California are eligible to receive an AIP Matching Grant up to 5% matching funds required to obtain an FAA AIP grant (this equates to 4.75% of the total project amount). The AIP Matching Grant reduces the airport sponsor's matching amount from 10% to 5.25% of the FAA AIP grant. A significant complication of this program is that the airport sponsor cannot apply for this grant until it receives an FAA AIP grant award letter. These funds are limited and commonly are not sufficient to provide matching funds for all agencies that request them. This forces airport sponsors to accept the FAA AIP grant offer before knowing that an AIP Matching Grant will be available.
- Acquisition and Development Grant: Funds for the Acquisition and Development Grant program derive from State aviation funds not allocated for the Annual Credit Grant or AIP Matching Grant programs. State law indicates that these funds may be used for acquisition and development of airports and ALUCPs. In practice, most of the funds are used for maintenance of airfield pavement or similar basic projects. Grants are limited to \$500,000 annually, with a 10% airport sponsor match required. For a project to be eligible, it must be submitted though the State's Capital Improvement Plan program.

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Loan Program: Funds from this California Airport Loan Program may be broadly used for construction and land acquisition projects that benefit a public-use, general aviation airport or improve its financial self-sufficiency. Historically these loans have been commonly used to construct revenue-generating facilities such as aviation fueling stations and hangars. However, they may also be used to provide the local match for AIP grants. Funding varies with the available balance in the Local Airport Loan Account. This is a revolving fund in which the principal and interest payments received on loans are used to fund new loans.

3. Other Federal Funding Sources

Several federal agencies administer grant programs. The ones most likely to be relevant to airports are described below.

Federal Transit Administration (FTA): The FTA administers a large number of grant programs (see https://www.transit.dot.gov/grants) related to various types of transit systems. Some programs are directly administered by FTA and some are administered by states. A few of these programs directly target rural areas and small cities. The potential value of these grants is to connect airports to adjacent communities. Grants could be used to develop stops at airports or expand bus service to airports. These are competitive grants.



Federal Transit Administration

> Public Works and Economic Adjustment Assistance Programs: The Economic Development Administration administers the Public Works and Economic Adjustment Assistance Programs. These competitive grants can be used for capital investments as well as economic planning and revolving loan programs. Grants can be awarded for amounts from \$100,000 to \$3 million. The principal limitation is that construction grants must show how jobs will be directly



created by the grant-funded project. The potential value for the airports is in providing facilities for a prospective tenant that have documentable jobs once constructed. Siskiyou County Airport is the most plausible site for a project of this size, because of the amount of land available for development.

➤ U.S. Forest Service Grants: The USFS has grant programs that have a limited potential to be of value to airports located in forested areas. For example, a project that replaces trees that were obstructions with trees with lower heights at maturity could be successful in obtaining a grant. The program with the highest grant potential is the National Urban and Community Forestry Challenge Cost Share Grant. The amount available in recent years has ranged from \$500,000 to \$900,000 annually.



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➤ Federal Emergency Management Agency (FEMA): FEMA has a grant program that funds projects that will reduce impacts of future disasters. The program is funded under the Robert T. Stafford Disaster Relief and Emergency Assistance Act. In 2019, a grant from this program was awarded to the City of Willits for the removal of trees that penetrated the airspace around its airport. Airports with adjacent forested areas, such as Happy Camp and Dunsmuir, might be able to obtain grants for similar purposes.



➤ U.S. Department of Agriculture Rural Development: The U.S. Department of Agriculture's Rural Development office administers several programs of potential relevance to the airports in Siskiyou County. The programs most likely to be of value are:



- Community Facilities Direct Loan and Grant Program: This program has the potential
 to fund public-use facilities, such as a general aviation terminal, at the Siskiyou County
 Airport. Since a wide variety of projects could qualify for this grant, there may be other
 ways that this source could be used.
- **Rural Energy for American Program:** This program might fund the development of a solar farm at any airports which have sufficient land.
- **Business and Cooperatives Program:** This program could be used to support development of a business, aviation-related or nonaviation, on airports with available land.
- **Rural Utilities Service:** This program could possibly be used to fund needed improvements to the wastewater treatment at Siskiyou County Airport. The challenge would be demonstrating job creation.

4. Other State of California Funding Sources

Several state agencies administer grant programs that could be used for infrastructure development. The ones most likely to be useful for airports in Siskiyou County are described below.

State Water Resources Control Board: The State Water Resources Control Board operates a number of grant and loan programs that can be used for water and wastewater treatment projects. These funds could help provide needed improvements to water and wastewater treatment at the Siskiyou County Airport. Programs include:



- Proposition 1 Small Community Wastewater grants
- Clean Water State Revolving Fund Program loans
- Drinking Water State Revolving Fund Program loans
- Safe Drinking Water State Revolving Fund loans

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California Infrastructure and Economic Development Bank (IBank): IBank operates a loan program through its Infrastructure State Revolving Fund Program. Loans are available to fund a variety of infrastructure projects. A project must promote economic development that



attracts, creates, and sustains long-term employment opportunities. Potential projects include sewer and water systems, general aviation terminal/fixed base operation buildings, and aircraft storage hangars.

> California Energy Commission (CEC): The CEC offers two loan programs for energy efficiency and energy generation projects. One program has no interest rate, while the other is one percent. This program can be used to fund energy generation projects, such as solar farms. Program funds can also be used to purchase water and wastewater treatment equipment.



5. Local Agency Capital Funding Sources

For completeness, it is appropriate to note that Siskiyou County and the two municipalities that operate airports have two general sources of funds that can be applied to airport operating and capital needs.

- > General Fund Revenues: In many cases, general aviation airports receive subsidies from the airport sponsor to cover operating deficits or provide matching funds required to receive federal and state grants. Some airports may also receive subsidies from other municipalities or counties that benefit from the presence of the airport. Tax revenues that contribute to the agency's general fund can be used for airport capital projects. Airport projects must compete with the wide range of services and facilities operated by these agencies.
- > Bond Revenues: Local agencies can issue various types of general obligation or revenue bonds for capital investments. Bonds are expensive to develop and are typically only costeffective for large capital projects. They are not well suited for airfield maintenance projects. They could be relevant if a project would produce significant revenue or tax benefits to the local agency.
- > Special Taxing District: Some general aviation airports receive funding through property taxes, both directly and indirectly. An airport may be granted direct taxing authority through state legislation when a stand-alone entity, such as an airport authority, is established to own and operate an airport. In other situations, airports may indirectly benefit from the taxing authority of the airport sponsor, such as a municipality or county, when a portion of the taxes collected by the airport sponsor are designated for the airport. For example, the Truckee Tahoe Airport District, which owns and operates Truckee Tahoe Airport in Truckee, California, receives a share of property taxes collected within the district.

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6. Private Capital Funding Sources

Although there are many sources for private grants or donations, most focus on general community programs and facilities. They could be combined with larger funding sources that include employment generation.

- McConnell Fund: The McConnell Funds are managed by the Shasta Regional Community Foundation. Many of the projects funded are upgrades and repairs (such as a new roof) to existing facilities that serve the public. It could potentially be used to upgrade the pilots' lounge/general aviation terminal buildings.
- > Company Donations: While less common, private donations may also be a source of funding. Donations can be used as matching funds to help secure a grant or as capital for projects, vehicles, equipment, tools, and materials that may not be eligible under federal and state grant programs. Larger businesses that service Siskiyou County have occasionally provided donations for community-oriented projects. These have included banks with offices in Siskiyou County and Pacific Power. Wealthy families with ties to Siskiyou County are also a potential source of donations. For example, a local businesswoman offered to donate \$10,000 to the Norwalk-Huron County Airport in Norwalk, Ohio, to be used as matching funds to help secure an AIP grant. In North Carolina, businesses benefiting from the presence of the Raleigh Executive Jetport at Sanford-Lee County donated money to furnish and decorate rooms in a new general aviation terminal building. A plaque in each room acknowledges the donation and recognizes each contributor. In all cases, the challenge will be to define an airport-related project that is meaningful to the company or family. These sources, unlikely to be a sole source for major capital improvements, could, however, support smaller projects.
- > Public-Private Partnerships (P3s): P3s take many forms. A common example involves a private operator bidding for control of certain assets of a public enterprise. The bidder calculates a net present value for the assets to be acquired and enters into a long-term lease with the public enterprise (e.g., the airport sponsor). The lease term must be sufficiently long to allow the bidder to amortize the upfront payment in full and enjoy a reasonable rate of return. Due to the reliability of the cash flow and the more favorable rates of return, P3s have become popular with pension and insurance funds. Sponsor grants a private entity the right to design, build, maintain, operate, or finance buildings or infrastructure. Many options exist regarding division of responsibilities for construction, financing, management, and payment to the sponsor who maintains ownership of the particular asset.

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The Siskiyou County Local Transportation Commission (SCLTC) has engaged the services of Aviation Management Consulting Group (AMCG) and Mead & Hunt (M&H) to conduct all necessary research, technical analysis, and community outreach to develop a Regional Aviation Plan 2020-2024 (RAP) for all public-use airports located in Siskiyou County (County). The RAP will provide the SCLTC a comprehensive and coordinated aviation plan whereby the airport sponsors of the seven public-use, general aviation airports located within the County can identify all available revenue and funding sources, enhance existing revenue and funding sources, and prioritize funding to sustain and enhance the "system of airports".

The results from this survey will better assist AMCG and M&H in understanding the needs and desires of current and future based aircraft customers and local users of the seven public-use, general aviation airports located in the County. The survey will take approximately 15 minutes to complete. While your participation in this survey is completely voluntary, your opinion and input is valued. Your survey responses will be strictly confidential and data from this survey will only be reported in aggregate. Your information will be coded and will remain confidential. If you have any questions, do not hesitate contacting Jeff Kohlman (Managing Principal, AMCG) at 303.792.5203 or jkohlman@amcg.aero.

Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below.

Do you have an aircraft based (either permanently or seasonally) at a public-use, general aviation airport in Siskiyou County?

- 1. Yes
- 2. No

Do you rent or operate aircraft at a public-use, general aviation airport in Siskiyou County?

- 1. Rent
- 2. Operate

Identify which airport you primarily rent or operate aircraft from.

- 1. Butte Valley Airport (A32)
- 2. Dunsmuir Municipal-Mott Airport (106)
- 3. Happy Camp (36S)
- 4. Montague-Yreka Rohrer Field (105)
- 5. Scott Valley Airport (A30)
- 6. Siskiyou County Airport (SIY)
- 7. Weed Airport (O46)

Identify which airport your aircraft is based at (either permanently or seasonally).

- 1. Butte Valley Airport (A32) Permanently
- 2. Butte Valley (A32) Seasonally
- 3. Dunsmuir Municipal-Mott Airport (106) Permanently
- 4. Dunsmuir Municipal-Mott Airport (106) Seasonally
- 5. Happy Camp (36S) Permanently
- 6. Happy Camp (36S) Seasonally
- 7. Montague-Yreka Rohrer Field (1O5) Permanently
- 8. Montague-Yreka Rohrer Field (1O5) Seasonally
- 9. Scott Valley Airport (A30) Permanently
- 10. Scott Valley Airport (A30) Seasonally
- 11. Siskiyou County Airport (SIY) Permanently
- 12. Siskiyou County Airport (SIY) Seasonally
- 13. Weed Airport (O46) Permanently
- 14. Weed Airport (O46) Seasonally

What type of aircraft storage facility do you rent/utilize at the airport selected?

- 1. Apron
- 2. Tiedown
- 3. T-Hangar
- 4. Shade Hangar
- 5. Executive Hangar
- 6. Corporate Hangar
- 7. Community Hangar
- 8. Other

Would you like to rent/utilize a different type of aircraft storage facility?

- 1. Yes
- 2. No

What type of aircraft storage facility would you like to rent/utilize?

- 1. Apron
- 2. Tiedown
- 3. T-Hangar
- 4. Shade Hangar
- 5. Executive Hangar
- 6. Corporate Hangar
- 7. Community Hangar
- 8. Other

What type of aircraft do you own and/or operate?

- 1. Piston Single Engine
- 2. Piston Multi Engine
- 3. Turboprop Single Engine
- 4. Turboprop Multi Engine
- 5. Jet (less than 12,500 pounds MTOW)
- 6. Other

How do you operate aircraft out of the airport selected?

- 1. Part 91
- 2. Part 91K
- 3. Part 135
- 4. Other

How many average landings per month do you make at the airport selected?

Is your primary residence in or near Siskiyou County?

- 1. Yes (in Siskiyou County)
- 2. Yes (near Siskiyou County)
- 3 No

How close is your primary residence to the airport selected?

- 1. 1 to 5 miles
- 2. 5 to 10 miles
- 3. 11 to 15 miles
- 4. 16 to 20 miles
- 5. 21 to 25 miles
- 6. 26 to 30 miles
- 7. 31 to 35 miles



Please rate each of the following airport attributes based on their importance for the reason you use the airport selected.

	Absolute	Very	Somewhat	Less	Not	N/A
Location to Local Residence	Necessity	Important	Important	Important	Important	
Location to Local Residence						
Location to Business/Customers						
Pilot and Passenger Facilities/Amenities						
Aircraft Storage (Availability)						
Aircraft Storage (Pricing)						
Number and Type of Approach Procedures						
Number and Type of Departure Procedures						
Approach Lighting						
AWOS						
Runway Length						
Runway Width						
Runway Weight Bearing Capacity						
Fueling Service (Availability)						
Fuel Service (Pricing)						
Aircraft Maintenance & Repair (Availability)						
Aircraft Rental (Availability)						
Flight Training (Availability)						
Please identify any additional airport attributes that should be rated and provide a rating for the airport selected.						

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What impact would the following scenarios have on the number of aircraft landings you have at the airport selected?

	0% Increase	20% Increase	40% Increase	60% Increase	80% Increase	100% Increase	
Increased Runway Length	Increase	Increase	Increase	Increase	Increase	Increase	
Increased Runway Width							
Increased Runway Weight Bearing Capacity							
New or Enhanced IFR Approach Procedures							
New or Enhanced IFR Departure Procedures							
Addition of Approach Lighting							
Addition of AWOS							
Addition of Fueling Services (if none)							
Addition of Aircraft Maintenance (if none)							
Addition of Aircraft Rental (if none)							
Addition of Flight Training (if none)							
airport selected and the level of impact.							
What impact would the following scenarios have on the number of aircraft landings you have at the airport selected?							
	0% Decrease	20% Decrease	40% Decrease	60% Decrease	80% Decrease	100% Decrease	
Decreased Runway Length	Decrease	Decrease	Decrease	Decrease	Decrease	Decrease	
Decreased Runway Width							
Decreased Runway Weight Bearing Capacity							
Loss of Fueling Services (if any)							
Loss of Aircraft Maintenance (if any)							
Loss of Aircraft Rental (if any)							
Loss of Flight Training (if any)							



Please identify any additional scenarios that would negatively impact the number of aircraft landings you have at the airport selected and the level of impact.							
Airport Management and Operations: Please provide your rating in each of the following areas for the airport selected.							
	Excellent	Good	Average	Below average	Poor		
Communications with Airport Management/Staff							
Responsiveness of Airport Management/Staff							
Attitude of Airport Management/Staff							
Airport Safety							
Airport Security							
Airport Maintenance							
Perceived Support for Airport (State)							
Perceived Support for Airport (Airport Owner/Operator)							
Perceived Support for Airport (Community)							
Please identify any additional airport management and operation categories that should be rated and provide a rating for the airport selected.							



Airport Infrastructure, Facilities, and Services: Please provide your rating of the following categories for the airport selected.

	Excellent	Good	Average	Below average	Poor		
Aircraft Storage (Availability)							
Aircraft Storage (Type, Level, and Quality)							
Aircraft Storage (Pricing)							
Airport Infrastructure (Airside)							
Airport Infrastructure (Landside)							
Pilot and Passenger Facilities/Amenities (Availability)							
Pilot and Passenger Facilities/Amenities (Type, Level, and Quality)							
Vehicle Parking (Availability)							
Vehicle Parking (Type, Level, and Quality)							
Avgas Fuel (Availability)							
Jet Fuel (Availability)							
Aircraft Maintenance (Availability)							
Aircraft Maintenance (Type, Level, and Quality)							
Aircraft Rental (Availability)							
Aircraft Rental (Type, Level, and Quality)							
Flight Training (Availability)							
Flight Training (Type, Level, and Quality)							
Please identify any additional airport infrastructure, facilities or services that should be rated and provide a rating for the airport selected.							
Please provide any additional comments and/or suggestions either related to the airport you selected or the other airports located in Siskiyou County.							
Please identify any Siskiyou County businesses or government agencies that you believe benefit from one of the airports located in Siskiyou County.							